

BHHM 07

VARDHMAN MAHAVEER OPEN UNIVERSITY, KOTA

Culinary Operations



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UNIT 1

Quantity food Production Equipment

Structure

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1.0 Learning Objective

The unit will introduce to the learner to the concept of equipment used on cooking with focus on quantity cooking. It will help learner to

- a. Identify various equipment used in the cooking
- b. Various factors that influence the purchase of equipment
- c. Care and maintenance of various equipment

1.1Introduction

The development of the kitchen in the world has been intricately and intrinsically linked with the

development of the cooking range or stove. Until the 18th century, open fire or charcoal were the sole means of heating food, and the architecture of the kitchen reflected this. When technical advances brought new ways to heat food in the 18th and 19th centuries, architects took advantage of newly-gained flexibility to bring fundamental changes to the kitchen.

The team "equipment" refers to all machinery, tools, utensils, crockery, cutlery, and furniture which may be used for preparation, service and storage of food. The types of equipment required vary with the activities carried out in a particular area of work. For example, in storage areas mobile and adjustable racks are used for shelving goods, whereas in the service areas cabinets with drawers for cutlery and napkins, are necessary and so on.

Equipment may be classified in a number of ways, according to weight or size, the order in which it is used in the production cycle of a catering establishment, or according to their mode of operation,.

1.2Classification of Equipment

WEIGHT OR SIZE

Catering equipment is often referred to as 'heavy duty', 'medium duty' or 'light duty' equipment. The heavy duty category includes all equipments that are generally too heavy to move around, and are therefore meant to be fitted or installed after careful planning. Such equipment, as the name suggests, are made of heavy metal sheeting that can withstand hard use for long periods of time. These are therefore generally fixed on a platform but may also be free-standing with a 10 cm clearance from the floor for ease of cleaning. The term 'heavy duty' also indicates that such equipment is capable of performing heavy work and therefore can be subjected to long hours of use. Heavy or large equipment such as ranges, ovens, mixing machines are generally manufactured in standard sizes with only slight variations, produced by different manufacturers. Information regarding capacities, output and other features are always provided for each piece of equipment by the manufacturer. In addition, installation and operating instructions are part of the suppliers responsibility

Medium duty equipment refers to pieces which are not too difficult to move for occasional cleaning. They may be so constructed as to get dismantled or moved around as such for rearrangements or placed on wheels to make them mobile.

Light duty equipment can be more easily handled and moved around or placed anywhere when required for use. It is light to use, generally smaller in size than the heavy or medium equipment.

ORDER OF USE

The steps involved in the production of meals is the basis for the classification as follows:

(a) Receiving equipment: These include receiving platform, weighing scales, trolleys, and so

on.

- (b) Storage equipment.. Like racks, shelves, bins, jars, etc. Portable bins for flour, sugar, rice, pulses are more convenient to use and keep clean.
- (c) Kitchen equipment: This includes all items necessary for the preparation, cooking, holding and serving of food and washing up. Apart from this, equipment utilized for the purpose of waste materials like peels, foods from the base and sides of pans, plate waste, wrappings or empty cartons is of utmost importance in any establishment.

Kitchen equipment would therefore consist of tables or work surfaces; peeling, cutting, grating and slicing equipment; oven, grill, cooking range, hotplate, chappati-puffer, for cooking bainmarie, trolley, serving dishe trays, crockery and cutlery for holding and serving. Washing up equipment may include sink units, dish washers and driers, instant boilers for hot running water depending on the size of the establishment. Plates 1-4 .indicate a wide range of available catering equipment.

Complete washing-up units are now available in stainless steel in place of the old sink connected to a water tank on one side and a waste pipe on the other. The complete units now provide free flowing water and underground drainage.

Equipment for waste disposal has been transformed from the open dumps to the closed bins, sealed bag and incinerators. The latter come in sealed units which can be fitted into sinks to crush any plate waste and peelings that may be passed through the sink. Incinerators are also available as separate free-standing disposal units meant solely for dealing with waste materials.

This method of classifying equipment is the most commonly used one as it helps to relate each equipment with the are in which it is to be installed and the use to which it is put.

MODE OF OPERATION

Depending on whether the equipment is fully hand-operated, semi-automatic or fully automatic, the various pieces can be classified. Equipment in the first category consists of mechanical pieces such as beaters or whisks, hand slicers, etc. which require greater effort to use than the semi-automatic types. The latter use electrical energy but need to be monitored carefully. These include mixers, electric whisks, fryers, etc. Automatic types include sophisticated equipment with thermostatic controls and timers. Which can be adjusted to required times and temperatures. The latter two categories are motorised and therefore require less attention and effort to operate. Their output in terms of the number of units of food prepared is also more than the mechanical and semi-automatic types of equipment.

Whatever may be the method of classifying equipment, it is important to remember that every food service establishment will have different needs in terms of size, numbers and types of

equipment required. While the same piece of equipment may be fixed in one establishment it may be free-standing or mobile in another.

Manufacturers of catering equipment also offer a service for custom built equipment to suit the needs of individual establishments with respect to size, shape, weight, etc. lo fit into available spaces. A number of multi-use equipment are also available and used in food preparation and service.

1.3 Large Equipment

Ranges and Ovens

An oven is an enclosed compartment for heating, baking or drying. It is most commonly used in cooking and pottery. Two common kinds of modern ovens are gas ovens and electric ovens. Ovens used in pottery are also known as kilns. An oven used for heating or for industrial processes is called a furnace or industrial oven.

Steam ovens introduce water (in the form of steam) into the cooking chamber. This can aid the formation of a crisp crust on baked goods and prevent the drying-out of fish and casseroles. The degree of humidity is usually selectable among at least several steps. Some steam ovens use water carried to the oven by the user in a container; others are permanently connected to the building plumbing.



Steamers

There are basically three types of steaming ovens: Atmospheric; Pressure; and Pressure less.

There are also combination steaming ovens; pressure/ convection steam; pressureless/ fully pressurised; steaming/ hot air cooking; combination of hot air and steam; combination of hot air and steam with two settings.



Boiling Pans

Many types are available in different metals – aluminium, stainless steel, etc – in various sizes (10, 15, 20, 30 and 40 litre capacity) and they may be heated by gas or electricity. As they are used for boiling or stewing large quantities of food, it is important that they do not allow the food to burn. For this reason the steam-jacket type boiler is the most suitable. Many of these are fitted with a tiltingevice to facilitate emptying the contents.



Deep Fat-Fryers

A deep fat-fryer is one of the most extensively used items of equipment in many catering establishments. Fryers are heated by gas or electricity and incorporate a thermostatic control in order to save fuel, regulate temperature and prevent overheating. There is a cool zone below the source of heat into which food panicles can sink without burning, thus preventing spoiling of other foods being cooked. This form of heating also economizes fat consumption.



Hot-Cupboards

Hot-cupboards are used for heating plates and serving dishes and for keeping food hot. Care should be taken to see that the amount of heat fed into the hot-cupboard is controlled at a reasonable temperature. This is important, otherwise the plates and food will be too hot.



Bains-Marie:

The bain-marie consists of a large container filled with a working liquid (usually water) and another, smaller container filled with the substance to be heated. The smaller container is partially immersed in the larger container, and the larger container is heated. The temperature of the working liquid cannot normally exceed the boiling point of that liquid at the ambient atmospheric pressure, and so the temperature of the inner container can be brought to a known limit and held there by bringing the outer working liquid to a boil.



Bains-Maries are used for holding large quantities of food for service. It is generally used for servicing foods in commercial organizations such as hospitals, restaurants, canteens, hotels

etc.

Grills and Salamanders

A salamander grill is a culinary utensil used to cook food. Mainly used to grill, the utensil can also be used for browning food, such as a pastry or pudding, as a portable stove, or as a broiler.

The salamander or grill heated from above by gas or electricity probably causes more wastage of fuel than any other kitchen equipment through being allowed to bum unnecessarily for long unused periods. Most salamanders have more than one set of heating elements or jets and it is not always necessary to have them all turned on full.



Salamander bars and draining trays should be cleaned regularly with hot water containing a grease solvent such as soda. After rinsing they should be replaced and the salamander lit for a few minutes to dry the bars.

For under-fired grills to work efficiently they must be capable of cooking food quickly and should reach a high temperature 15-20 minutes after lighting, and the heat should be turned off immediately after use. When the bars are cool they should be removed and washed in hot water containing a grease solvent, rinsed, dried and replaced on the grill. Care should be taken with the fire bricks if they are used for lining the grill as they are easily broken.

Sinks

A sink or basin is a bowl-shaped fixture that is used for washing. Different materials are used for sinks according to the purpose for which they are intended: Heavy galvanised iron for heavy pot wash; Stainless steel for general purposes.



1.4 Mechanical Equipment

Mincers

Mincers are used for chopping vegetables or meat. Mincers are compact, hygienically designed machines capable of providing a cool, efficient mincing action without squashing or pulping the product.



Mixers

A mixer is a kitchen appliance intended for mixing, folding, beating, and whipping food ingredients. Mixers come in two major variations, hand mixers and stand mixers.



Refrigerators

A refrigerator (often called a "fridge" for short) is a cooling appliance comprising a thermally insulated compartment and a mechanism to transfer heat from it to the external environment, cooling the contents to a temperature below ambient

Refrigerators are extensively used to store foods which deteriorate at ambient temperatures; spoilage from bacterial growth and other processes is much slower at low temperatures. A device described as a "refrigerator" maintains a temperature a few degrees above the freezing point of water; a similar device which maintains a temperature below the freezing point of water is called a "freezer". Freezers keep their contents frozen. They are used both in households and for commercial use. Most freezers operate at around $-18^{\circ}C$ (0°F).



1.5 Selection of Equipment

Some basic factors are important in making decisions for selection of equipment for any catering establishment These include:-

1.5.1 Size And Type Of Establishment

Size refers not only to the spatial measurements of the structure or premises for food preparation and service activity but also to the number of customers that must be catered to at one time. Thus, selection of equipment is directly affected by the volume of food prepared, as this is related to the size or capacity of the particular piece of equipment. Too large an equipment in relation to turnover expected will lead to under -utilisation and inefficiency, while too small a capacity will not be able to meet the demands of the customers.

The smaller the size of the establishment the more important it becomes to select equipment which is mobile and has the ability to be flat packed and stored when not in use. These characteristics enable the limited space to be utilized to the maximum.

Today a variety of equipment are designed so that parts of one can be used interchangeably with another. These are referred to as modular equipment and are very useful where size of establishment is small and the number of equipment that can be installed need to be limited. Modular equipment also increase efficiency of work (ers) by cutting out the extra time and effort which would otherwise have to be spent in transferring food from cooking to holding to serving and then again to storage containers and vice versa. Also the number of pans and trays, required can be reduced to a minimum because of their multiuse quality. An additional advantage is the reduced handling of food that is made possible because the containers that are used in tile preparation, service or holding of food are identical in size and shape to those that are used for storing the same food in the refrigerator, freezer or dry store.

For small or medium sized establishments it is a good idea to select multifunction equipment such as griddles which can be used for making dosas (fermented batter pancakes), eggs, chappatis and cutlets. Similarly, steamers for vegetables, poaching eggs or making idlis (steamed fermented batter preparation), are useful pieces in any kitchen.

The space in which the equipment is to be installed will also determine the size, shape and capacity to select. It is well established that smaller floor areas are required if multiuse and modular equipment are utilised inany area be it production, service or storage.

Common sizes of modular trays are 30 cm x 40 cm ($12" \times 18"$) or 22 cm x 30 cm ($9" \times 12"$) made in different materials and may be selected according to convenience. Some times spaces can be made to size in order to match the standard sizes of equipment available for instance two 22 cm x 30 cm (9"x 12") pans or one 30 cm x 45 cm ($12" \times 18"$) tray could be used in the same space.

While selecting designs of equipment to suit individual food preparation and service requirements it is wise to maintain harmony with the general plan of the building. This is

particularly important in service and dining areas where the organisation comes in contact with its customers. This is applicable even more in a self service type of establishment where the food production is often carried out in full view of the customer.

1.5.2 Type of Food To Be Served

Equipment also depends on the methods of cooking required for the dishes planned to be served. For instance, if a canteen menu consists mainly of fried snacks and beverages, the selection will be between investing on a fryer or a simple 'kadai'. On the other hand, if the menu consists of ready baked items, sauteed or shallow fried snacks and sandwiches, a fryer would be unnecessary.

The form in which the food is purchased will further influence the selection of equipment for any establishment. For example, if ready idli, vada, dosa mixes are purchases for preparing the dishes for a particular menu, then there would be no need for a wet grinder which would be necessary if the mixtures were prepared from raw ingredients. Similarly, if quick frozen vegetables are used in the preparation of meals, 11lere would be no need to select equipment like vegetable peeling machines.

It must, however, "be remembered that while menus can be changed easily, changing equipment is expensive. Its selection therefore needs to be carefully planned Lo provide menu flexibilities. Multifunction equipment are good choices and can easily lake care of menu variations.

1.5.3 Usage & Utility Of Design

Every equipment selected must be able to fulfil a specific purpose, be it efficiency of production, profitability, convenience or customer satisfaction in terms of aesthetically presented meals, greater value for money or comfortable serving and dining.

There are a number of space and labour -saving equipment available on the market which can perform different functions simply by the use of attachments to the main machine. Fig. 8.1 shows one such very simple item to which attachments for kneading, beating, mixing, grating and slicing can be fixed for use when required. Such multifunction devices are ideal for small outlets like coffee. shops, canteens or lunchrooms.

The design of a piece of equipment has to be considered in term of the results desired. For example, it is very important to know if a piece of equipment is actually maintaining the temperature necessary for keeping food safe during holding or in storage. But it is very difficult to know this in the case of certain equipment unless the manufacturer indicates clearly the temperature at which the equipment is designed to operate. In selection, designs which have temperature indicators and warning lights should be preferred, because equipment tested in the manufacturer's laboratory may work differently in the catering environment. The usual markings on certain equipment are in the form of dials showing gradings of temperature as. '1-10' or 'high', 'medium' and 'low' which are not an accurate guide to the user.

The selection of an equipment will be affected by its frequency of use. For instance, there is no point going in for a wet grinder if items of food requiring wet grinding are placed on the menu once in a fortnight or a month. It would be wiser to select a kitchen machine which can be used for wet grinding when required and for blending, grating and other functions as well.

The degree of automation and standardisation required in terms of selecting gadgets or labour saving devices will depend on factors like the expectations of the customers and the availability of labour for the catering establishn1ent. In some locations where labour is cheap and easily available for doing repetitive jobs it might no (be desirable to invest on highly automated equipment. Also, customers may prefer the variations in the quality of a dish from day to day, and meal to meal. For instance, all customers eating at one time, may not demand a puffed plain chappati, some may want a 'parantha''. In such cases it may be desirable to select a griddle plate rather than a chappati puffer which may be grossly underutilised.

Very often tall claims are made by manufacturers regarding the utility of their equipment. Caution must therefore be exercised to ensure that every piece is tested in the work situation to verify that it can be easily operated by the staff and is approved by them. Any equipment no matter how good or useful, may prove futile if the persons who are to use it do not like to operate it. Since people react differently to changes in their habitual methods of working it is only with their acceptance and approval that equipment investments will prove worthwhile.

1.5.4 Price

The cost of a piece of equipment almost always determines buying choice. The materials of which an equipment is made affects its price and. rate of depreciation along with sanitation, satisfaction and usefulness in terms of suitability and hard wearing qualities. The investment cost of an equipment has to be weighed very carefully against the cost of time and effort saved in using it for better production in terms of quality and quantity of the product and tile cost of operating and maintaining it.llle rate of depreciation and the rate of return on investment are also very crucial considerations.

Selection is also guided by the funds available to the buyer over a period of time. This is because he has not only to pay the initial cost of the 'equipment and installation but also recurring costs for operation, care and maintenance necessary for every equipment whatever, its size. The larger the budget the wider becomes the. choice of the buyer.

1.5.5 Convenience In Use

As far as the operation is concerned most catering staff should be able to acquire the skills to operate equipment quite easily. If sophisticated auto controls are provided then the personnel need to be trained in their use and cautioned against the dangers of ruining the equipment and causing accidents due to negligence. While operators may be able to follow simple operative or push-button instructions, they may not be aware of the dangers of mishandling the equipment.

In such cases instructions in the form of simple steps clearly pasted on the door of the equipment or on the wall above it helps operators to depend less on their memory, and avoid unnecessary expense and trouble. In the long run this helps to make work more productive and satisfying to both management and staff.

1.5.6 Safety

Since catering involves dealing with heavy equipment, sharp tools, glass and cutlery, large volumes of food, electricity, gas and hot and cold water, it is extremely important to select equipment that is guaranteed for safety while in operation and when not in use. All sharp edged and movable parts should be provided with safety guards. There should be no crevices which may harbour dust, dirt and therefore microbes, endangering the safety of the environment. and the food produced.

In selection of equipment for safety the doors should open opposite the area where dishes are to be placed, so that doors do not come in the way, of working smoothly and accidents are avoided. While deciding on cooking equipment, models of cooking ranges with concealed electric elements should be selected with due regard to the safety of all working in the environment who may touch tile heated plate accidentally, not knowing it has just been switched off.

1.5.7 Fuel Consumption

The operating costs of a piece of equipment is an important consideration in its selection. In certain areas, for example, electricity may be cheaper as a cooking fuel than gas or coal. In such cases it would be better to select electrically operated equipment rather than gas ranges. Some equipment to consider in terms of energy saving would be pressure cooking equipment, convection and microwave ovens for quick cooking and even heating, In addition, the costs of installation, maintenance and operation will determine the selection. It would be wiser to select equipment with higher initial costs and lower maintenance costs than to go in for cheapter models which have higher recurring costs. The availability of spare parts for the equipment. in case of need for replacement, is also an important consideration for selection. Very often expenses incurred in importing parts, and the time period involved in acquiring them can place the equipment out of use long enough to make it uneconomical. As far as possible equipment should be selected from within the range manufactured locally. This is also an advantage in terms of getting pieces custom built to suit individual requirements.

1.5.8 Ease of Maintenance

Selected equipment should be of materials which are non-corrosive, non-toxic, stable to heat and moisture and non-absorbent. All equipment should have smooth surfaces, not requiring any special detergents for its cleaning. Too much shiny chrome on equipment looks attractive when new but involves extra effort and time in wiping and polishing.

The properties of different metals used in fabricating equipment, and their relative advantages for use in food production and service areas are listed below :

Material	Remark
Copper	Used with polishing and lining of Nickel or Tin to prevent chemical reactions
	Very heavy but provides good heat transfer during cooking.
	Stainless Steel is fast replacing copper
Aluminum	More easy to mold hence extensively used for storage bins and cooking equipment.
	Light in weight and has high thermal and electrical conductivity
	It is hard, durable and non corrosive and can withstand high temperature.
	It may loose colour easily due to alkaline or Acidic reactions.
	Also used in non stick utensils with Teflon coating
Polyethylene	It is light and easy to handle.
	Is less expensive then steel drums.
	Has longer life than the mild steel conventional containers.
	Is non-denting and leak proof.
	Is Non-corrosive and rust proof.
	Can withstand high temperatures of upto 110C and therefore be filled with hot liquids materials.
	Has reusability and resaleable value.
	Is hygienic and washable.
	It conforms to the UN Packaging code, IMCO standard and Indian standard IS: 6312
Galvanised Steel and Iron	Used for equipment such as griddles, frying

	pans, ranges etc	
	It has a coating of zinc on the base of metal	
	Replacement and repair costs are high.	
	Looks un attractive	
Non-Corrosive Metals	Metals like nickel, copper and stainless steel which are non-corrosive are mixed as alloy	
	Extensively used in institutional Kitchens because they are easy to mold, are non corrosive and cheap.	
	These are also attractive, easy to clean and strain resistant.	
Silver Plate	Known as EPNS, electro plated nickel silver is used widely for service in big establishments. Needs lot of care and frequent polishing Expensive hence not used by small operators	

1.6 Summary

Equipment must be obtained from manufacturers and suppliers of repute so that it is backed by a guarantee. They also ensure prompt after -sales service and maintenance when required. All equipment selected must be checked for seals and labels indicative of quality. It is advisable to check with other users if a new model is being selected, to get an opinion on the usefulness and efficiency or possible drawbacks of the equipment in use before purchasing.

Equipment properly selected should reduce the drudgery of routine jobs, make 'messy' jobs more organised and improve the hygiene and sanitation standards of the working environment.

According to Professor Fuller the three main factors which affect catering policy are greater mechanisation, simplified operation and creased use of convenience foods. However, one must not be carried away with the idea of automation or labour saving equipment to the extent of sacrificing the 'personal touch' so important in a food service industry.

1.7 Review Questions

- Q1 Give basic Classification of equipment?
- Q 2 Briefly Discuss Large Equipment with two examples.

- Q 3 What are the factors for selection of equipment?
- Q4 What are the various metals used in equipment?
- Q 5. List various types of mechanical equipment
- Q 6. List various types of electrical equipment

1.8 Suggested Reading

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Unit 2

MENU PLANNING

Structure

2.0 Objective

2.1 Introduction

2.2 Basic principles of menu planning recapitulation

2.3 Points to consider in menu planning for various volume feeding outlets such as Industrial, Institutional, Mobile Catering Units, Planning menus for

2.4 Types of Menu

2.5 Summary

2.6 Question

2.7 Reference

2.0 Objective

- Basic principles of menu planning recapitulation
- Points to consider in menu planning for various volume feeding outlets such as Industrial, Institutional, Mobile Catering Units, Planning menus for

2.1 Introduction

A menu is virtually a list of dishes planned for production in a catering operation and many include full meals snacks or beverages. It performs a number of functions:

- 1. Introduces the establishment to the customer.
- 2. Authorises production of meals in the kitchen.
- 3. Helps to prepare shopping lists for foods and ingredients and is the basis for establishing purchasing procedures.
- 4. Determines the type of equipment, staff skills and the type of supervision required.
- 5. Helps to organise spaces and work in stores, kitchens and service areas.
- 6. Determines the style of service to be set up.
- 7. Forms the basis for the calculation of food and labour costs, overhead expenses and desired profits.
- 8. Reflects the type of customer the establishment wishes to attract.

- 9. Satisfies the needs of the customers for nutrition, hunger, as well as social and psychological needs.
- 10. Introduces interesting food combinations to customers, and through specialty foods impairs knowledge of the foods eaten in different states, countries and cultures.
- 11. Provides a means of developing good eating habits in people.

The success of a food service operation, no matter what its size, depends heavily on those who plan the menus and how they do it. While it may seem a simple exercise of providing something to eat and drink, in practice good menu planning requires a lot of skill. It is important therefore, that people responsible for planning menus have the following qualifications:

1. Wide knowledge of foods: This involves knowledge about different kinds and varieties of foods; their seasonal availability; nutritional and anti-nutritional factors; and the presence of toxic elements in certain food varieties; the edible portion obtained from each food; colour, taste and flavour differences and how they can best be combined for meals; acceptability; and cost factors.

2. Knowledge of different methods of preparing and serving foods: Even though the menu planner does not necessarily prepare or serve the food, it is important for him to know which food is best prepared by which method of cooking. This is possible only if the planner knows about the inherent qualities of foods in terms of texture, composition, colour, flavour, and all other chemical and physical properties. The knowledge of the behavior of these characteristics to the application of heat, addition of salts, acids, oils and spices, so essential to any method of food preparation, is also important.

Similarly, knowing what food is suited to what style of service; which flavours blend together best, and how to combine them, are the crux of a customer's acceptability of the food.

3. Knowledge of the ways in which food can be aesthetically presented: Whatever may be the colour, taste and flavour of a meal, its appearance on tile plate or in tile display case detem1ines customer's choice. Plate 10 illustrates different ways in which simple foods can be presented to catch the eye of the customer. Equipped with this knowledge the menu planner can introduce a variety of form and colour in menus to attract the customers.

4. Knowledge of the customer: It is vital for tl1e menu planner to be familiar with the food expectations of the customer. A general idea of his food preferences or favourites, physiological requirements, paying power, social standing, and the reasons for eating out are essential for achieving customer satisfaction. People eat outside their homes for a number of different reasons, and each one affects their choice of food at a particular time. For instance, office goers stopping for a quick lunch would prefer light inexpensive meals, while an executive who is entertaining would choose more elaborately presented items. Similarly, captive customers, such as children in a boarding school, or people in an old age home will necessarily eat from a less selective menu, because they have no choice but to eat what is prepared in the institutional kitchen. Again, people travelling long distances look forward to food, because other activities or movements 'on a train or an aeroplane are restricted. The menus should therefore be interesting in terms of providing variety in form, colour and flavour. In addition, they need to be easy to serve and eat while travelling.

Also, people have very strong likes and dislikes becallse of cultural, religious or traditional reasons. For instance, in India people have taboos regarding the eating of beef; most people are vegetarians, and some religious orders do not permit even the consumption of onions and garlic. In muslim countries peopl abstain from pork consumption and any meat eaten is bought from shops where animals are slaughtered by the' Halaal' method. In Sikh communities meat slaughtered by the' Jhatka' method is acceptable (Glossary).

While it is not possible to provide for each and every customer's needs, menu planning which shows a consideration for these special needs is to be commended. It is a challenge therefore, to the planner to provide variety and interest in a meal according to the general needs and expectations of the customer. To do this, the planner does not only have to be knowledgeable but also imaginative and creative.

In a catering establishment the person who plans the meals is also generally required to perform the tasks of ordering foodstuffs from suppliers; liaising with stores for issue of non-perishables; preparing kitchen schedules and staff rotas; supervising service, etc. The number and nature of the tasks vary with the size and type of establishment.

2.2 Importance of Menu Planning

Planning menus becomes essential when food has to be bought, prepared and served in large quantities to people of varying tastes and requirements. The advantages gained from planning are:

- (a) An ability to provide appetizing, nourishing and attractive meals to customers at a fair price. This is only possible if the meals are planned in advance, so that a price advantage can be obtained by buying seasonal foods and in quantities which carry discounts.
- (b) Planning meals helps to determine requirements accurately. Food buying can thus be controlled through advance buying, because-quantities are calculated beforehand.
- (c) Planning ensures that food is not wasted because any leftovers can be creatively incorporated in the next day's menu which is already planned out.
- (d) Time and effort spent on haphazard ordering, shopping and receiving of food materials is saved to a large extent.
- (e) Time and effort spent in preparation and cooking is also minimized because ingredients needed for subsequent meals are known in advance. For instance, garnishes can be prepared along with salads at one time. Chopping and cutting

separately for each dish is avoided. Time is not lost in waiting for ingredients, as they are already purchased and ready for use.

- (f) Carefully planned menus save fuel and cut down on waste through excessive leftovers. For example, milk may be heated together for the preparation of hot beverages, setting of curds, or for preparing cottage cheese, instead of placing the milk in three containers and heating small quantities separately. Similarly, planned menus can help to save on quantities and ingredients. e.g. leftover curds may be added to boiling milk for making cottage cheese or 'paneer' instead of vinegar or lemon juice. Also, the whey obtained need not be wasted, but added to curries, soups, etc.
- (g) Planned menus help to note favorite dishes and those which did not sell too well in the past. From these records, decisions regarding the number of portions of each item to be prepared for service can be made.
- (h) Planned menus also tend to offer a wider choice of dishes because seasonal varieties of foods can be introduced in advance. This becomes very restricted when preparation has to be done on the basis of spot decisions.
- (i) Advance planning removes a lot of anxiety for the planner, and enables clear-cut instructions to be given to staff. This also helps to create harmony among people at work.
- (j) If the planner cannot come to work one day, the customer does not have to go hungry or disappointed, because the work goes on according to plan.
- (k) Meal planning helps in the accurate calculation of food costs and inclusion of items that can be profitably sold. It also becomes far easier to fix selling prices in advance for the information of the customer.
- (l) Planning helps to take care of price fluctuations so that there are no frequent changes on menu displays as far as the customer is concerned.

Planning menus is thus an important activity for every food service operation and catering managers need to ensure procedures which can detem1 ine how best it can be done.

2.3 Factors influencing Menu Planning

Before actually writing down the items on the menu, every planner must consider the basic factors important to the situation and the customer for whom the menu is being planned.

The Situation

The basic factors to be considered in terms of the situation would be:

- (a) Location of the establishment in relation to the market.
- (b) Space available for storing food in wholesome condition. "

- (c) Size of kitchen and service areas.
- (d) Number of staff and their skills.
- (e) Equipment available in kitchen and -service areas.
- (f) Policy of the establishment in terms of:
 - (i) What type of customers it wishes to attract. This will be basically determined by the pricing policy, in that the higher the prices, the richer the customer and the higher his power to pay.
 - (ii) The extent to which the establishment wishes to invest on catering, in comparison to other areas of expenditure like furniture, decor, equipment, and so on.
 - (iii) Degree of automation or labor-saving devices desired.
 - (iv) Personnel in terms of trained staff or cheaper unskilled labor.
 - (v) Profit margins.
 - (vi) Type of service, i.e. whether food is served or preplated and handed over or packed and delivered.

The Customer

Customer's are likely to represent people of varying ages, activities, occupations, physiological status and sex. They would also belong to various religious and cultural backgrounds, some perhaps, having rigid food habits. The following discussion will illustrate how the various requirements of customers forms the basis for menu planning.

If a menu has to be planned for school children living in a boarding school, the factors to consider would be:

- (a) School children generally spend a lot of physical energy at play. They are also at various stages of growth and so their general nutritional needs would have to be considered while planning their meals. Some children may have special requirements. because of sickness or injury .The considerations would therefore place emphasis on planning balanced diets suitable to their need.
- (b) Children are generally restless and do not like to spend too much time at the table eating. Besides, they feel rushed in the morning because they must reach their class on time. So menus have to provide dishes that are quick to eat, and yet satisfying. Perhaps something they can carry out of the dining hall without messing themselves, such as a hamburger or a salad roll; or stuffed parathas, pancakes, and whole fruit would be in order.
- (c) Children also tend to get bored with foods easily. So menus need to provide variety in colour, texture, taste and flavour.

(d) The climatic and weather conditions are an important consideration too. In very dry and hot weather, children lose a lot of body water and salts through perspiration. The menus then would need to introduce extra liquids and salts, because children do not generally like to drink plain water.

In humid hot climates the feeling is that of stress, lethargy and discomfort, and spirits sag. In such conditions, meals need to provide cool, foods like ices, chilled juices and fruits, cold meats, crisp salads, cold soups and other refreshing and nourishing drinks.

In cold climates, on the other hand, extra energy is required to keep warm, and fried crisp foods like croquettes, cutlets, chips, kebabs, samosas or fried rice, pulaos, hot breads and hot beverages and desserts would be the choices.

- (e) Children have varying appetites and often prefer snacky meals at frequent intervals, to a few large ones.
- (f) In general, boys prefer foods with a higher satiety and caloric value than girls of the same age, who become figure conscious and prefer light, frequent but small meals. Also, girls generally prefer foods that are more highly spiced.

The menu planner therefore, has to consider all these factors when planning menus for children, in addition to making them cost effective, tempting and profitable. Below are some sample menus for different types of customers indicating the special features considered in planning.

MENU A: A day's menu for a boy's boarding school.

Breakfast	Lunch	Теа	Dinner	
Boiled Egg	Veg Curry	Fried Snack	Mix Dal	
Buttered toast	Mix vegetable	Milk shake	Cabbage potatoes	
Milk	Curd (yoghurt)		Chappati	
Fruit	Chappati		Rice	
	Rice		Suji Halwa	

Note: The menu pattern has taken into consideration the following factor:

- (a) The Indian food habits which include a curry, curd, dal preparation Indian dessert at dinner.
- (b) Boys need nutritional balance provided by foods from all food groups in each meal. Satiety v.lue through a fried snack, egg and halwa take care of protein and extra calories for activities.

- (c) The menu provides in its format, a lot of flexibility, so that different curries, halwas, forms of egg, snacks, fruits and shakes can be provided according to seasonal availability.
- (d) It may be noted that boys do not like salads unless they are incorporated in sandwiches or rolls, which can be introduced as snacks.

MENU B: A day's menu for a girl's hostel.

Breakfast	Lunch	Tea	Diruler
Cereal	Veg Curry	Pakoras	Dal
Egg (Poached)	Raita (Various)	Chutney	Sauteed vegetable
Buttered toast	Salad (Assort)	Теа	Chappati
Milk	Chappati		Rice
Fruit	Pickle		Halwa/Kheer

Note: The difference in Menus A and B is chiefly in the provision of spicy preparations like 'raitas', pickle and assorted pakoras. Also salads and egg have been provided in preference to fried forms. The menu is just as flexible and can be varied according to the mood of the customer and the availability of ingredients.

It may be noted that Menus A and B are only samples, and if a cyclic menu is prepared which is the normal practice in hostels, then specific dishes may be written out for several days in advance.

The factors taken into consideration for conferences are:

- (a) The dishes planned are generally acceptable to persons from all countries
- (b) The composition of the menu should allow for quick service between conference sessions.
- (c) Colour, texture, flavour and attractiveness should be taken care of through providing different heights on a buffet table during service.
- (d) There is very little scope for over spicing. For those who wish to add more spices, these could be placed on the table.

While the menu accounts for tastes and habits of people from all over the world, the Indian touch that many delegates might like shouls not absent.

MENU C: Canteen Menu.

Special for the Day-Burger	Rs. 20.00
Veg Pakoras (with Chutney)	25 per plate
Sandwiches	20 per pack

Samosas	10.00 a piece
Tea	5.00 per cup
Coffee	10.00 per cup
Cold drinks	15.00 per bottle or can

Note: Factors considered in planning are:

- (a) Habits of the customers-for instance, if it is an office canteen, hot beverages will be demanded all day.
- (b) Purchasing power of the customer.
- (c) Favourites among customers especially included in the day's special.
- (d) Easy to serve in disposables.
- (e) Satiety value and value for money.
- (f) Minimum on the spot preparation.
- (g) Items which will provide attractive displays.

The objectives of a good menu plan meeting nutritional requirements of school children (Menus A and B) can be completely marred if children from the boarding school go out and eat in a cafe or canteen. As seen from Menu C, canteens need not always focus attention on nutritional value. This is because even if they did, children may not make the right choices in buying.

While menu planning has its advantages, it also requires a lot of time and thought to be effective. The effort of every planner, therefore, should be to minimise the time spent on other activities. In order to do this it is a good policy to plan meals several days ahead, as this helps to:

- (i) Prepare market orders in advance and reduce last minute purchasing. It also allows enough time to shop when markets are least crowded.
- (ii) Helps to control costs through cheaper buying when larger amounts are needed for a week's supply as against daily shopping.

With practice and experience, menu planning too can become a less and less time consuming, and more effective activity.

WRITING MENUS

- 1. Use a pencil to write menus so that it is easier to erase an item if changed, till the plan is finalised.
 - 2. Keep handy:
 - (a) An indexed updated file of standard recipes giving costs, portions, selling price per portion, gross profit percentage along with ingredients and methods. It will help to include the name of alternate cost equivalent ingredients for use in the

recipe in case of lack of availability of some ingredient. An index number for cross reference is necessary for locating and consulting other pages in the file.

- (b) Lists of prices of seasonal and other foods, Updated for ready reference.
- (c) Lists of substitute foods in the form of exchange lists.
- (d) Ideas for use of leftovers, developed with experience.
- (e) List of the most profitable dishes.
- (f) Lists of foods in stock at the time of planning in terms of leftovers, prepared and raw foods. It is useful to have stock lists in order, that will enable earlier stocks to be planned into menus first before fresh ones are used.
- (g) List of staff on leave so that skills of existing, staff can be kept in mind before placing an item on the menu.
- (h) Lists of popular food combinations.
- 3. With the above available aids and the basic considerations in mind, menus can be written out with names of dishes in the following order:
 - (a) Starter/soup
 - (b) Main dish
 - (c) Side dish(es)
 - (d) Cereal preparation
 - (e) Salad
 - (/) Accompaniments
 - (g) Dessert
 - (h) Hot beverage
- 4. Menus must be written in a form that is simple, legible and attractive to draw the customer's attention.
- 5. Names of dishes should be clearly understood. If unfamiliar names are used, description should follow the names so that the customer knows exactly what he is ordering.
- 6. Sauces and accompaniments create a feeling of getting good value for money', and must be indicated on the menu. these may be written as a separate item, or along with the dish for which it is the special accompaniment.
- 7. Care is necessary in word selection and correct spelling of dishes, particularly if they are written in a foreign language. For example 'Half-Fried Chicken' will convey a different meaning to the customer than 'Fried Half Chicken'.

8. Portion sizes must be indicated along with prices (Menu C) so that the customer does not feel cheated. In some cafeterias the price is expected to indicate the portion size; but this is sometimes deceptive and damages consumer relations.

Menus can be written in many different ways according to the purpose for which they are intended. In food services where a waiter style of service is offered, the menu is generally presented in the form of a folder. This introduces the establishment to the customer and therefore gives information other than the list of dishes and prices. It covers tile address, telephone numbers, service Liming and other relevant information.

In a canteen, lunchroom or cafeteria, the menu would probably be displayed as a list of item with prices on a board. In smaller establishments a blackboard and chalk may be used to write the date and menu items offered every day.

On formal occasions small menu cards may be placed in front of each guest cover for letting guests know in which order items will be served. Such menus generally indicate the set menu ordered by the host. Each card also carries the guest name on it so that each guest is directed to his proper position at the table vis-a-vis the host (ess).

In institutions like hostels, hospitals, homes, menus are charted out for a week or ten days in advance, according to a meal plan varying from a three to five meals a day routine. This plan would include breakfast, lunch and dinner, with some institutions providing something at tea.and/or bedtime also. Some establishments may even provide a beverage, fruit or midmorning snack.

In institutional menus, it is not the practice to indicate prices or portions because these establishments are generally non-profit making, and the price for meals is never paid by the customers or inmates at the point of service.

The decoration and colour used on menu cards should blend with the general decor and nature of the establishment. It should be attractive and pleasing, and not detract from the items listed. If a menu card is written out for a special occasion it should convey the mood of the occasion.

2.4 Types of Menus

Menus are basically of three types: (a) A la Carte; (b) Table d'hote; and (c) A combination of the two.

A la Carte Menu

This menu is basically a choice menu and generally offers choices of dishes or items to customers under ten food categories as shown in Fig.

The categories in an a la carte menu generally follow a sequence on the menu card, in which the customer would normally select items for the meal. Each dish is priced separately so that a choice can be made according to the taste and purchasing power of the customer.

A la carte menus may range from being limited to a few items in a coffee shop, canteen or cafeteria to being extensive in the case of restaurants providing waiter service. These menus are used chiefly by

STARTERS	SOUPS	MAIN DISHES	SIDE DISHES	CEREAL PREPARATIONS
Jal Jeera	Rasam	Fish	Vegetables cooked in	Chappati
Egg Mayonnaise	Mushroom	Chicken	various ways	Paratha
Prawn Cocktail	Tomato	Mutton	-	Naan
Assorted Snacks				
Assorted Salads	Chicken	Cottage Cheese	-	Rice preparations
Stuffed Tomatoes	s Goulash	Stews	-	Breads
Spring Rolls	French Onion	Legumes	-	Puris
-	-	Vegetables	-	-
-	-	-	-	-
-	-	-	-	-
SALADS	DESSERTS	S SANDWICH	ES SNACKS	BEVERAGES
Tomato Onion	Fruits	Ribbon	Fried	Теа
Spring Salad	Ice-Cream	Chutney	Sandwiches	Coffee
Green Salad	Souffles	Salad	Grilled	Buttermilk
Beetroot Radish	Pies	Chicken	Baked	Hot chocolate

Fig. a la carte. Choice categories on an a la carte menu.

Custards

-

-

Salad

-

Russian Salad

Waldorf Salad

Mixed Tossed Salad -

Profit-making establishments, and are suitable for leisurely dining, because the wide choices offered and selected, take longer to process in the kitchen before they can be served. A sample a la carte menu of a food service is given in Fig above.

Double decker

Scandinavian

Club

-

_

_

-

The advantage of a la carte menu is that customers can choose any item according to their appetite, mood and pocket.

Milk shakes

Juices

_

-

Table d' hote Menu

Table d'hote means 'table of the host. This menu is therefore a set menu, in which a number of dishes are planned by the host and food served and offered at a set price. Some eslablishments especially those located in out of the way places with seasonal customers, such as at hill stations in tropical countries or at places of pilgrimage where worshippers flock together at certain times of the year, follow set menus. Their selling policy is a 'take-it-or-leave-it' one, and little or no 11exibi1 ity is built into the table d'hote menus. This is so even when catering for travellers as on railways, airlines, etc. A typical table d'hote menu, is served in India in the form of 'thali' meals in some establishments and on trains. In the latter, stainless steel trays with sections of various sizes for serving the different menu items, are generally used. Similarly, the 'tray' meals served on an aircraft are all set menus.

Gradually table d'hote menus too are increasingly being planned to provide a little flexibility in the form of at least a choice of soup or beverage. Examples of partly set menus are seen in clubs, hostels, college canteens, etc. where a choice ~r side dishes or desserts may be offered keeping the main dishes and soup or beverage fixed. Figure below shows examples of different kinds of table d'hote and combination menus.

CLUB MENU	RAILWAY MENU
Dinner	Dinner tray
Mushroom soup	(Non-vegetarian)
Roast Mutton & Mint Sauce	Mutton/Chicken Curry
Roast Potato	Sautee Potatoes
Butter Cabbage	Spinach
Vegetable Cutlet	Curd
Caramel Custard	Salad (Onions and Green Chillies)
	Rice (boiled)
Indian Vegetarian Dinner	Chappati
Mushroom Soup	Papad
Lauki Masala	Pickle
Mutter Mushroom Curry	
Dal Urad	Vegetarian Tray
Tandoori Roti	Dal/Kofta Curry
Caramel Custard	Dal
(Courtesy: Delhi Gymkhana Club,	Sauted Potatoes

New Delhi	Spinach
	(Rest same as for non-vegetarian menu).
	(Courtesy: Northern Railway.
COLLEGE CANTEEN MENU	AIRLINE MENU (MEAL)
Vegetable Burger	Chicken or Cheese Pattie
Chicken Chowmien	Salad with French Dressing
Chana Poori	Pulao (Vegetable or Meal)
Samosa with Chutney	Cream Cake or Lemon Tart
Idli with Sambar	
Cake	
Tea	(Courtesy: Indian Airlines)
Coffee	
Cold drinks	COMBINATION MENU
(Courtesy: Lady Sri Ram College, New Delhi	Tandoori Choice
	-Chicken
	-Seekh Kabab
	-Mutton Tikka
	Curries and dal
	Bread
	-Naan
	-Kulcha
	-Roti
	-Paratha
	Ice-creams

Note: The combination menu can take the form of a table d' hote menu with built-in choices to the extent desired.

Fig. Table d' hote menus with a la carte element built into them.

Combination Menu

In some establishments it is common to have a la carte menus with a 'Special for the Day' attachment to it. This 'special' may be a set of dishes with an accompaniment, or a plated meal

offered in a table d' hote form at a set price. More and more establishments are now including vegetarian and Chinese dishes on their menus for the odd customer.

Food service establishments should be able to provide at any time, an alternative to the planned menus, if customers' food habits demand, keeping ethnic preferences in mind, For example, if a customer does not eat eggs, the food service should be able to make an omelette without it. Alternatives could be 'besan poora' in which the egg is substituted by gram flour and a batter prepared, spread thinly on a hot griddle, cooked, folded like an omelette and served.

Use of Menus

Menus may be used in a number of ways according to the requirements of food service establishments. since menu planning is a time and effort consuming activity.. it is not advisable to change menu plans too frequently. A la carte menus are hardly ever changed since they provide a large choice for the customer anyway. The only reasons for change would be increase in cost prices of dishes which may make some dishes unprofitatlle to serve; change in tastes of customers who do not demand the dish any longer; or retirement or resignation 'of the specialist cook preparing the dish(es). Table d' hale menus are changed more frequently to provide variety of set menus within the same price range.

Cyclic Menu

In the case of hotels, hospitals, homes and other institutions, menus are planned in advance for periods of time varying from five days to one month. These are then cycled or repeated. Such menus are termed as 'cyclic' menus and are usually combination type menus providing choices within a set frame work.

Menus are generally used cyclically in establishments with captive consumers, whose numbers do not vary appreciably and where tight budget limits prevail. Also the special requirements of these customers are known over a period of time and can be incorporated into the menu as required.

With short-term cycles, however, there is a tendency to produce menu fatigue. The customers tend to remember what is served on Mondays, for example, and may look forward to meal only on a favourite menu day. To counteract this a number of methods are adopted.

- (a) Planning is done for an odd number of days, so that the same menu does not fall on the same day of the week, or same date of a month. For example, plans may be made for 5, 10 or 20 days to prevent people associating a particular menu with a particular day of the week.
- (b) A general menu structure may be set, but dishes changed to introduce variety. For example, a menu may say 'seasonal vegetable) or 'curried meat' so that the Customer does not really know what he is getting. It could be peas on one day, cauliflower on another, and meat curry followed by curried mince or meat balls, and so on. Variations can also be introduced through different methods of cooking the same

food. This also provides flexibility to the planner, who can with confidence mix and match foods and flavours according to Stocks, availability, budget and special occasions, etc. Figure below is a cyclic menu.

MEAL	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY	SUNDAY
BREAKFAST	Porridge, Bread	Idli& Chutney	Egg to order	Uppama (with	Egg on toastast	Porridge	Paratha (Stuffed)
	(Butler, Jam)	Milk/tea	Bread, Butler	peas and nuts)	Milk/	Cheese on	Curd
	Milk-Tea/	Coffee	Milk/Tea/	Fruit Milk/	Tea/Coffee	toast Milk/	Tea/Coffee
	Coffee	Fruit	Coffee	Tea/Coffee	Fruit	Tea/Coffee	
LUNCH	Curry, Salad	Curry	Curry, Raita,	Curry Seasonal	Curry Curd	Curry	Biryani
	Papad/Pickle/	Seasonal	Fried Rice	Vegetable	Pulao	Seasonal	Salad
	Rice	vegetable,	Chappati	Salad, Chappati	Chappati	Vegetable,	Raita
	Chappati	Salad Rice	Pickle	Rice		Salad	Pickle
		Chappati				Chappati/Rice	
TEA	Sandwiches	Biscuits	Samosa	Cake	Cutlets	Pakora	Burger
	Tea	Tea	Tea	Tea	Tea	Tea	Tea
DINNER	Dal	Dal, Seasonal	Soup Pasta	Dal, Seasonal	Soup	Dal	Soup
	Seasonal	Vegetables	Preparation	Vegelables,	Pizza	Seasonal	Cullets
	Vegetables	Salad	Stewed fruit	Salad	Ice-cream	Vegetables	Seasonal
	Chappati	Chappali	with custard	Chappati		Salad	Vegetables
	Rice	Rice		Rice		Chappati	Bread
	Fruit Salad					Rice	Caramel
							Custard

Cyclic Menu.

NOTE:

- 1. All curries, Biryanis, Pulaos, Pizzas, Cutlets etc., may include choices between vegetarian and non-vegetarian preparations. It is customary to serve non-vegetarian dishes at least twice a week.
- 2. Sweet is generally served at dinner time when the diners are at ease, at the end of the day, in the above menu it is served every alternative day, but may be twice a week depending on the policy of the establishment.
- 3. Fruit is served at least once a day.
- 4. Salad as often as possible.
- 5. Accompaniments like papad, pickle, etc, are generally offered when no vegetable side dish is prepared, especially at lunch which is a hurried meal.
- 6. Anyone who wishes to have milk at tea time can order it specially.

7. Sunday breakfast is usually a heavier meal than on the other days, as people have more time to eat, and generally take breakfast later than usual.

Cyclic menus have a number of advantages:

- (a) Once a basic menu pattern is established, the planner has more time for creative thinking in terms of adjustments that become necessary in case of holidays, special circumstances, staff shortage, delays in deliveries, and so on.
- (b) The staff and work in kitchens and service areas get better organised because future production plans are known.
- (c) Recipes get standardised with repeated preparation, making food service more cost effective for management and customers.
- (d) Work can be equally distributed throughout the day so that tensions are reduced for kitchen staff irrespective of peaks and troughs in catering operations.
- (e) Available equipment and skills can be optimally utilised if menus are thoughtfully planned in advance.
- (f) Administrative work involved in ordering and stocking food is reduced, because a single order can be placed indicating timings for deliveries over a season.

Thus, a well planned cyclic menu can be a very effective tool of management in a food service department. It should, however, have a degree of flexibility built into it, which can be made use of to introduce seasonal variations, special requirements (for the handicapped, aged, or sick), and to control waste).

CONSTRUCTION OF MENUS

A menu needs to be constructed in a systematic manner. A list of the steps that can be followed is given below.

- 1. Decide on the menu pattern considered suitable in terms of its being set, selective, or a combination of both.
- 2. Decide on the degree of flexibility to be incorporated.
- 3. Write down the main dish and plan side dishes around it. The items selected should help to enhance the colour, texture, flavour and taste of the meal.
- 4. Menus should be checked vertically and horizontally in case of cyclic or weekly noncyclic menus, to ensure that the same food item or dish d(~s not appear consecutively on two or more days. It must not have the same item used twice in the same meal, nor on the same day. For example, avoid using mutton for lunch and dinner on the same day, or using potato for lunch as well as tea snacks.

While constructing menus for a week, a good principle to follow is to list the main dishes for all the days first to avoid repetitions, then follow the various steps to construct the rest of/the menu.

The aim of every planner should be to create menus that will be fairly consistent in their quality characteristics, costs and therefore selling prices from day to day. To do .this, seasonal and price fluctuations can be taken care of by selecting cheaper side dishes for expensive main dishes and vice versa, while at the same time complementing the main dish in flavour, taste, colour and texture. When choices are planned, the dishes chosen should be comparable in the 'value for money' that they provide, and in other aspects as necessary for particular customer requirements. Variations can be provided with the use of different cooking methods, seasonings or garnishings.

Selection of desserts should generally relate to the main course of the menu. If the latter is light, the dessert chosen can be rich, and vice versa. Desserts may be fruity, cooked puddings (hot or cold), creamy, such as ice-creams, souffles, custards, kheers, or based on cakes, gelatin or pies, depending on the rest of the menu.

While there are meal times established for main meals all food service establishments may not necessarily plan for full course meals. Small cafeterias, canteens, kiosks, mobile vans or vendors may cut down on menu items and provide plated meals, snacks and beverages; Such menus are becoming more and more popular as people want a bite between meals, when in company or while travelling. In addition, specialty menus which do not require to change are planned on popular demand. An appropriate example is tile 'chaat' stall in India, where the same 'chaat' is prepared and served day after day because customers of all ages enjoy it. In fact, 'chaat' of any kind is such a hot favourite that a small corner set up in a cafeteria can become tile source of customer attraction to tile establishment.

Menu planning is thus an art involving knowledge, thought, insight, creativity and initiative, which with practice can become a very satisfying and profitable activity.

MENU DISPLAY

The menu can perform its rightful functions only if the customer can see and read it clearly on or before entering a food service establishment. Menus may be displayed in many ways.

- 1. On a menu board with the help of plastic letters which can easily be re-arranged to change the name of the dish from day to day. Such a display is neat and clear. Its effect can be enhanced by usin contrasts in colour such as white on black or red on white' boards.
- 2. In small kiosks, canteens or mobile catering vans, menus are displayed on blackboards written in chalk. The disadvantage is that chalk can be erased by customers brushing past.
- 3. Printed or neatly typed menus may be inserted in plastic cases and displayed. This method is of followed in coffee shops and cafeterias where a number of customers handle the menu to make the selections.
- 4. In hostels or other institutions typed menus are displayed on notice boards outside dining areas. This enables people to make up their mind about dishes before they go

to service counters. The advantaged ties in faster service and no unnecessary crowding, since those who do not like the menu do not enter the dining area. In such displays, it is preferable to have glass shutters so that the menu is visible and yet protected from dust and mishandling.

- 5. Printed booklets placed in attractive waterproof folders are a method of presenting menus to customers in restaurants offering extensive choices.
- 6. On formal occasions such as for banquets~ small individual menu cards maybe typed and placed on menu stands in front of each guest cover. Sometimes separate cards carrying the names of the guest are placed alongside. This enables invitees to be directed to their proper positions on the table without commotion, and also indicates to each diner what courses are being served. In this form of menu display, there are no price or portions printed along with the dishes, as the diners do not have to pay for their meals..

2.5 Summary

Menu planning can save money on grocery bills, since predetermined meals cut down on impulse spending at the supermarket. Planning meals ahead of time can also be a time saver, since the need to go the store for missing ingredients is eliminated. Depending on the type of menus that are planned, the meals can increase a family's consumption of fruits and vegetables. Coupons or sales flyers from grocery stores can serve as helpful aids for menu planning, since families can organize their meals around the items that are on sale for the week.

2.6 Question

- 1. What is the Basic principle of menu planning?
- 2. Which Points to consider in menu planning for various volume feeding outlets such as Industrial, Institutional,
- 3. What is the Mobile Catering Units?
- 4. Describe the menu display?

2.7 Reference

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Unit 3

Indenting and Planning

Structure

- 3.0 Objective
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3.0 Objective

The learner will be able to

- a. Understand the objective of purchasing
- b. List out various principles of effective purchasing
- c. Prepare indent list
- d. Calculate area requirement for kitchen planning

3.1 Introduction & Principles of Effective Purchasing

The principles of effective purchasing are based on the commitment of the organizational funds to those items which are in highest demand for that amount of money, so as to lead the establishment to profitability and success. In catering, food constitutes the major variable cost and therefore purchasing decisions must be carefully made in consultation with user departments, sales and service to ensure efficiency.

Following principles of purchasing have been enumerated as a guide to making decisions:

• Continuity of supply:

This is of critical importance for minimizing or eliminating disruption in food production activities.

• Minimum Investment in stocks:

This is particularly noteworthy since food is not only variable in its perishability, but requires a large variety of ingredients for its production into meals, snacks, desserts, beverages and so on. Costs of space which can be alternatively utilized for profitable activities, along with storage and handling costs amount to a sizeable blockage of capital. Therefore quantities to be stocked need to be considered very carefully while purchasing.

• Security of stocks:

Forward buying has to be carefully balanced with present usage requirements. Security refers not only to guarding of stocks from pilferage or theft but also preventing spoilage or deterioration of quality in storage. One is mostly tempted to order quantities that may bring cash discounts immediately, but in long run may find that a large percentage of the commodities have to be discarded because they are unfit to be served to the customer.

• Maintenance of Quality:

The objective of purchasing is to procure those goods which are most suited to production requirements for end use, rather than those which rank highest in absolute quality, in terms of standard quality marks, grades or brands. With perishable fresh foods like fruits, vegetables, meats, eggs, bread etc. the purchasing department should direct deliveries straight to the user department or kitchen for production of quality meals.

• Procurement at low cost:

In the matter of buying food materials the principle should be to purchase at the lowest ultimate cost rather than lowest initial cost. This does not mean getting cheap, non-standard materials, but reflects the bringing down of procurement prices through negotiation or cutting on packaging costs while still maintaining quality standards. This is usually done through bulk package purchasing directly from manufacturers, and using single suppliers who are conscious of the quality and quantities that are required on a long term basis.

• Avoidance of Duplication and waste:

Interaction between purchasing production and user departments is important to achieve reduction of food waste and duplication of procurement, time and effect which can result from sudden menu changes or production policy shifts.

• Maintenance of Competitive position:

The one in-charge of purchasing must have a thorough knowledge of the market environment and the purchasing policies of those offering similar goods and service to their customers. This requires experience and a high degree of executive judgement, through which impending taste changes of customers can be gauged in advance.

A purchasing manage who can communicate these changes to production and service departments in advance can maintain the competitive position by drawing attention to costs, quality and prices that the market will take.

• Image with supplier:

What a supplier thinks of you and your organization can be an asset or liability in the procurement of foods and materials. It is therefore important to set up a value based image through high ethical standards that are then reflected in a supplier's response to the purchasing manager, staff and then organization as a whole. A supplier feels a sense of loyalty to the organization if he sees justice, honesty of dealing and not a sense of exploitation through corruption and bribery.

Besides this, the organization will experience less difficulty in procuring foods during periods of short supply or getting a price advantage during seasons of glut from loyal suppliers.

• Harmonious Environment:

Development of relationships that lead to harmony and cooperation both within the organization and outside it results in a sense of mutual trust and respect among all associates. Irrespective of which principles are used in the purchasing function of a catering establishment, the basic principle towards which everyone is working is the effective commitment of organizational funds and if the whole team works towards it together, the organization is bound to succeed.

3.2 Principles of indenting for Volume Feeding.

The basic fundamental in any of the food operation is to convert raw material into edible food products with or without application of heat. Many steps like procurement, processing, and cooking all have to be monitored along with purchasing of the raw material.

A list of raw material required for preparing a certain menu is required. In volume cooking, one has to look at the menu in entirety and prepare a detailed product list that needs to be prepared. In order to prepare this list, excel sheets are used on computers with the formulas fed into the

total column. One has to enter the ingredients required for each dish and it gives you a master indent list for placing orders.

The main reason for preparing such a sheet is that it gives one a concise ingredient list and ensures that you have not missed out any ingredient that needs to be ordered. This also helps in controlling production. The approach to recipes for bulk cooking is slightly different to that for an a la carte kitchen.

Yield of a product:

The yield of a particular commodity has a huge impact on the indenting for volumes. All the recipes should be updated with the yields, as we need to indent for the net weight in a recipe and not only for the usable weight. The cheapest item might prove to be expensive if the end yield of the product is low. Some suppliers now even sell pre-portioned meat so that the buyer gets an advantage and there is consistency in the product quality and cost.

Type of event:

The type of event for which food is required also plays a key role in the indenting of the food. A gala event would have a huge range of menu catering to even more than 1000 people whereas in small conferences the number of pax is relatively very low. So, different menu has to be decided for both the event as they are entirely different in themselves. When the variety of the dish is more, the quantities of the dish consumed will be comparatively less as most of the guests would like to taste most of the varieties. But in case of a conference menu, where the menu is limited, a good judgement based on experience would determine the right quantity to be produced.

Regional influence:

Regional food also plays a crucial role in deciding the indenting for a particular item. The type of the dish also plays an important part in deciding the quantity to be produced. The people preferences also are an important part in this crucial factor. People of Bengal would love to consume fish, while people from north India would prefer chicken. Also, chicken in chicken kebab is consumed much as compared to chicken curry.

Service style:

One important factor deciding the indenting is undoubtedly the style of service, whether buffet or ala carte. The consumption of the food is entirely different in buffet style eating and in preportioned service.

Seasonal Availability:

The seasonal availability of the fresh vegetables or the vegetables found in abundance is also a deciding factor during indenting. Such vegetables or raw material are procured much for function like gala events or wedding functions.

Purchasing good food is the basis for preparing and serving meals that are acceptable to the customer. Unlike purchasing for the home, the food service manager cannot always go to the market and choose what he wants from the variety available. In fact, he has the disadvantage of not being able to actually see the food he is buying till it comes to his door. This makes food purchasing a more difficult but challenging task.

For buying well, the person responsible for placing the orders for food on behalf of his customers must know:

(a) How various commodities are marketed and handled? Food and food products available in markets undergo a constant change. Newer varieties of fresh fruits and vegetables are constantly researched to improve size, colour, texture and flavour. A classic example is the appearance of newer varieties of citrus fruits and mangoes, different sizes of chillies, cabbages, tomatoes, potatoes, and so on.

Apart from the different forms and varieties grown, fresh food is available in forms as desired by a consumer. For example, meat can be purchased as chops, boneless, leg of mutton for roast, mince, etc. Fish may be bought whole or filleted as required.

Freezing technology has added a number of: possibilities to the range available by capturing the freshness and qualities of foods at their different stages of growth and preparation. Advances in processing technology are responsible for additional varieties of packaged foods made available to consumers. Instant foods, mixes, texturised protein products, dehydrated, canned, freeze dried, part cooked and ready to eat foods, have all become familiar to most buyers. In addition, there is a wide range of ingredients offered in the form of syrups, spices, flavouring, food colours, stabilisers and preservatives. to enhance the sensory and keeping qualities of food.

(b) What food and food products are available in the market in particular seasons? The manner in which foods are brought from the farms or factories to the markets provides a good index to their nutritional and keeping qualities. Fresh foods which have to be transported long distances reach the consumer after a lapse of a few days. It is therefore good policy to use fresh produce especially meat, fish; poultry and vegetables as soon as they are received in a food service establishment.

Different foods are packed and handled in different ways. For example, radishes and carrots are often packed in jute bags in standard weights and transported while cabbages or cauliflowers may simply be stacked one on top of the other directly in a truck. On their receipt in markets, vendors or retailers sometimes scrape carrots a.ld radishes and wash them in water before arranging them in their stalls or shops for sale. Such handling improves the sheen, colour and smoothness of the vegetables and attracts buyers. But such treatment reduces the keeping qualities. It is therefore important to know what handling procedures are followed before placing orders for foods. Appearances should not be the only characteristic on which to base one" s decisions regarding food purchasing. Quality characteristics of different foods, must be kept in mind.

(c) Prevailing prices and fluctuations occurring from time to time in wholesale and retail markets: Prices of foods fluctuate from season to season, and also in response to external factors like famines, droughts, factory closures, customer demand, and so on. A knowledge of these equips a food buyer to buy the cheapest and best products if he is vigilant of market conditions. An occasional visit to markets- wholesale and retail: is good policy instead of depending entirely on the price quotations and qualities offered by the suppliers. Suppliers tend to offer products which are most profitable to them Within their conditions of supply, and the best quality may never reach an establishment unless the supplier is aware of the buyer's knowledge. Knowing market prices also helps to make use of seasons of glut in terms of buying in quantities, which carry' cash discounts''.

(d) Size and types of packs available for bulk purchasing: Foods of the same quality come in many sizes and types of packs. For example, rice may be purchased in gunny bags of 25 kg each or polybags of 10 kg or 5 kg or polypacks of 1 kg net weight. Again canned foods come in different sizes containing different net weights of foods. Depending on the requirements of individual food service, the appropriate sizes will need to be purchased.

(e) Quantities to be bought of each commodity at a time: The buying quantities will depend on a number of factors:

(i) Degree of perishability of the food and thus its keeping quality.

(ii) Rate of use in the menus of establishments.

(iii) Frequency of deliveries possible.

 (iv) $% (\mathrm{iv})$ Amount of storage space available and the types of storages necessary for different foods

(f) Suppliers and their terms of supply: Very often suppliers agree to fixed prices of a range of items over a period of time and have no objections to supplying immediately on demand. Others may be rigid on the mode of delivery in which case stocks have to be maintained with the establishment. For some commodities the establishment may request for items straight from a farm situated close to the establishment. In that case the price advantage may have to be weighed against storage space and immediate, usefulness to capture the fresh quality characteristics in prepared meals.

(g) What quality is best suited for what use in the production of meals: This would be determined by the end use to which a food item purchased would be put a discussed in Chapter 12.

(h) How must food costs be controlled at the purchasing point: The control at the point of receipt of terns is vital to the profitability of a food service, The importance of this is clear from the following example:

EXAMPLE 1

f a bag of potatoes weighs 95 kg instead of 100 kg at a cost of Rs, 200 and 20 bags are used in a month by a food service establishment what would the implications of this ,be on costs?

The agreed price/cost of 100 kg potatoes was	=	Rs. 200
But actual cost of 95 kg at delivery	=	Rs. 200
		<u>200 x 1</u>
Cost per kg to the establishment		95 = 2.11
If the establishment used 2,000 kg the cost is	=	2,000 x 2.11 = 4,220
Expected cost price was	=	Rs. 4,000
Loss to the food service establishment		
every month	=	Rs. 220
Annual loss would be	=	Rs. 220 x 12 = Rs. 2,640

This only proves that small leakages if not checked at the point of purchase can change a profitability projected situation to one of loss. Others sources through which similar cost effects can be produced are accepting poor quality of food items, where peels are too thick or seeds too large affecting edible portions obtained from foods. Also processed foods which are not of standard quality such as stale or infested cereal products or defective cans can lead to preparation of food items which have lost their normal portion size, colour or flavour. The kitchen is often held responsible for quality of preparation, forgetting the importance of checking flavour at the receiving point. It stands to reason therefore that if poor quality is received, poor quality is served. This can gradually affect volume of sales and thereby profitability.

(i) Available kinds of storage space: The amount of space available for storing foods in an establishment will determine the amounts in tem'1S of pack sizes and numbers to be purchased. The kinds of storages such as cold or freezer storage, at hand will also affect the range of products that can be bought and stored. On this will depend the number of trips to the market or number of deliveries per week or month.

(j) Relative keeping quality of different foods: Different types of food, perishable, semi- and non- perishables require different temperature storages if food quality is to be maintained and loss through deterioration prevented.

(k) Communication of requirements to the supplier to ensure that the right quality is received in the right form and at the right time: The best way to communicate food requirements to a supplier are by the use of very accurate word pictures of foods and ingredients. These are known as specifications, samples of which have been illustrated in Chapter 12. Specifications also include details regarding the dates of delivery, pack sizes and numbers.

FOOD BUYER

An institutional buyer spends a lot of money on behalf of the establishment and for the customers. He thus bears a heavy responsibility for the well-being of both. Every food buyer therefore needs to possess certain qualities to work effectively, such as:

- (i) High moral and ethical values, so that he is not influenced by or obligated to suppliers in any way.
- (ii) Objectivity in his judgement of quality offered in terms of price and service.
- (iii) Loyalty to the institution through devotion to duty, exercising a sense of justice, being open-minded but alert to a seller's psychology and being hard working and patient.
- (iv) Loyalty to customers in terms of being able to recognise good quality food that is free from adulteration and contamination.
- (v) Skill in identifying markets, negotiating deals with suppliers and establishing good relations with people around.
- (vi) Accepting food brands that are marked by standardising agencies approving their quality such as ISI, FPO or AGMARK in India.

3.4 Information Required

Before beginning kitchen planning, answers to various questions are needed. Typical queries will include:

- What type of meal will be offered?
- How many persons will be served?
- When will these meals be required? Will the main meal be a.m. or p.m. i.e. will it be a lunch or dinner service or day and/or night long(coffee shop).
- How many sittings are there to be for each meal?
- What will be the extent of still-room requirements i.e. how much tea and coffee for lounge as well as restaurant will be required?
- Is allowance to be made for special functions?
- To what extent will 'convenience' foods be used?
- What area of floor space is available?
- What is the position of windows, ventilation, drainage, water supply etc?
- What type of service is proposed-self-service, cafeteria, waiter or waitress service.

Area required:

Kitchens are sometimes reduced in size in order to provide more space and increased seating in the restaurant. This reduction does not necessarily increase the trading capacity of restaurants, for kitchens, as much as a dining room can determine what number can be served during a service period. Reduction in kitchen size must, therefore, be planned to maintain (and even increased) productivity and still result in a satisfactory work place for employee. Cramped kitchen leads to delays and faults in service. These flaws may ultimately deter customers. Apart from adversely influencing volume of trade and repeat business inadequate kitchen facilities lessen staff efficiency.

No firm rules as to area can thus be given but the table below indicates kitchen space possibly required for hotels & restaurants offering waiter or waitress serviced meals. In attempting to estimate kitchen area on the basis of total daily catering capacity, it is similarly impracticable to lay down a hard & fast scale. The following tables are thus intended for board guidance only.

Number eating in business period	Kitchen area desirable per customer
	(in sq ft)
100	5 –9
100-250	4-6
250- 500	4-5
500-1000	3-4
Over 1000	2.5 -3

Approximate indication of kitchen requirements

Note:

Area reduction may be made when for example, convenience foods (frozen) are fully exploited. The lower figures relate to such simpler operations & the higher for more complete catering.

Possible area on a dialy basis of catering capacity

Table A

(AREA IN SQ. FT)

TOTAL MEAL	RESTAURANT	KITCHEN	TOTAL CATERING
PER DAY	AREA	AREA	FLOOR SPACE
100	375	150	525
250	560	215	775
500	950	300	1250
1000	1500	500	2000

TABLE B

(AREA IN SQ FT)

SEATING	RESTAURANT	KITCHEN AREA	ESTIMATED
CAPACITY	AREA		POSSIBLE
			NO OF MEALS PER
			HOUR
50	700	300	75
75	1000	400	115
100	1250	500	150
125	1750	750	190
200	2750	1200	300

Out of a hotel kitchen area anything from 15% - 25% may be required for the storage: according to the nature of the operations & its form of supplies with remaining space devoted to food preparation, cooking & serving.

Because of variations even between similar establishments the calculation of areas can not be reduced to en exact science. Architects & kitchen engineer adopt their own formulas for calculating requirements & may have rule of thumb adjustment to allow for differences in operations scope.

3.5 Kitchen Planning - Work & Method Study

A layout is based on a good work flow from the receipt of row materials at good entry to the dishes finally brought it servers for the guest. Over familiarity with processing sometimes inhibits radical thinking. A detached, analytical view is helpful. A work study specialist can provide such detachment of view, but a catering operation may be too small to employ work study staff full time or even to feel justified in engaging a consultant. Caterer who have studied in colleges are likely to have a 'process chart' (which breaks work into small parts called 'element'), fmls of movement, string diagrams (including work pathway) but many other study methods can also be used. Above all, an approach is needed which question. Planners should ask what is done? Why it is done, what should be done? Similar questions to be posed relate to where? When? How? Why? & are lined which those about whether a task can be eliminated or combined or its consequence changed or simplified. Caterers themselves, can, in short, 'self help themselves to anticipate 'bottle-necks or other barriers to efficiency by using work study & work simplification procedures in planning or altering kitchens. In big operations, help from work study specialists can be reward.

3.5.1 Flow of work:

Intelligent disposition of preparation machinery, sinks and work, benchmark reduce the total daily 'kitchen mileage' covered by the food and ct down unnecessary' traveling' by staff. Thus a perfect kitchen from this point of view is one in which raw and cooked material have minimum movement and only cover the same route once. When each section or parties is satisfactorily planned, therefore, they must be linked to comply as nearly as possible **to the flow illustrated below:**





A kitchen plan showing serving section adjacent to production & the waiter's route of travel in picking up selective meals.

Legend.

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1= Bakery equipment 2=Refrigerators 3= Work tables 4= Cold food service
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5= Cooking equipment 6= Hot food service 7= Tray table 8= Beverages

9= Screen 10= Soiled tableware deposit 11= Clean dishes

This may see simple but in many cases the task involves modernizing an existing old kitchen or laying out a kitchen within existing premises.

This can present difficulties in developing a work flow system. Often the best has to be made of limited opportunities layout becomes even more of a problem when sitting new plant is governed by existing constraints, e.g. drainage, supporting pillars.

A well planned layout largely depends on the following requirements which if properly provided for, establish good basic kitchen conditions.

- 1. Incoming supplies & raw materials (checking & weighing)
- 2. Food storage
- 3. Cooking
- 4. Server arrangements
- 5. Pan wash arrangements
- 6. Crockery & cutlery wash up

Kitchen planners, Engineers & Caterers may find area allocation is done first & that their detail work must follow but disposal of necessary equipment & even its detailed arrangement within the kitchen is best considered before final decisions about area utilization are reached.

Kitchen design fundamentals may be illustrated by the diagrammatic progress chart as above mentioned which indicates that efficient operation of kitchen depends on smooth work study. To obtain a continuous flow of goods from section to section as illustrated, the design of each section must be considered carefully to ensure that paths do not across & staff do not back-track more than is necessary.

3.5.2 Traffic lands & work aisles:

Adequate & properly devised traffic lanes & work aisles are in dispensable to the achievement of satisfactory work flow i.e. in providing straight flow lines for the receipt, preparation & cooking of the product with minimum path crossing & back tracking.

2 feet 6 inches	Allow two persons to pass
2 feet	Trolley width for 1 person to pass
5 feet	Width for 1 trolley to pass 2 persons working back to back
5 feet	Minimum for main traffic lane
3 feet	Minimum clearance width between equipment & work table
3 feet 6 inches-4 feet	Minimum in front of cooking equipment (to which food is conveyed by trolley

Widths of work aisles & traffic lane:

3.5.3 Goods receiving facilities:

External space is needed for parking of delivery vans. At goods entry, sufficient space is required for receiving & checking goods, to accommodate a weighing machine, checking table, stand up desk & space for delivered goods prior to storage. For smaller kitchens a separate space within the goods reception area should be provided for waste bins & empty containers. In larger

kitchens a separate room for waste may be required. The receiving area should also provide parking for hand trucks & trolleys.

Storage space allocation:

As we are aware that various types of stores e.g. dry, vegetable, fruit, meat & cold storage of dairy & fish products are required in a good kitchen. Total storage space should not exceed one quarter of kitchen area for storing of food & equipment. We can calculate space required for dry goods store on the basis of 8- 10% of total kitchen space.

Effects of changing food technology on kitchen planning:

Food technology is changing very fast & more efficient equipment is available, manpower & the space is becoming expensive day by day, kitchen layout has to come closer to the actual point of service & guests. This helps to meet the demand for faster coking & faster service. Guest's demands & tastes are changing rapidly & accordingly a caterer has to change his kitchen plan.

In new kitchen planning more weight age is given to space, fuel & man hour saving.

Because of the popularity of micro wave oven, infra red oven people are becoming health conscious & the new equipments has been introduced to take care of nutritional wastage of dishes. To help serve food faster, conveyer belts, mobile buffets, self service counters etc are introduced in catering establishments. See through & inter active kitchens are becoming more popular now-a - days.

3.6 Points to be considered in Kitchen Planning

- Environmental conditions
- Performance
- Temperature & humidity
- Lighting
- Color
- Sound
- Odor
- Work area
- Height
- Aisles & work areas
- Equipment
- Work space relationship
- Transportation

• Motion economy & human engineering

It is of up most importance that we consider the **environmental conditions** in our mind before starting the job of kitchen planning. Reports states very clearly that if a cow gives more milk or a chicken gives better quality eggs when scientific application of light & air are provided in the same manner a man would produce more work with comparable attention to his environment. Thus it becomes necessary for us in food service operation to design & equip the kitchen recognizing the environmental conditions under which man performs best.

The science of man's **maximum performance** through control of his environment is known as 'human engineering' or as 'human dynamics'. Adoption of human work & working environment to the sensory, perpetual, mental, physical, & other attributes of human being. Its goals are improvement of work & human welfare. As a matter of course these two sets of goals are in consonance with each other.

Let us have the kitchen temperature, humidity, colors, lighting noise & odors to start with. These environmental factors have always received considerable attention from the food service managers but only in front of house where the hotel user has held way & not in the back of the house where the food is prepared. things are changing now & increasing the salary of kitchen staff & the position on the organization make the commistime too important.

In general man is most productive between **91-93 degree Fahrenheit &** it means that air temperature should be around **65-73 degree** Fahrenheit. Experience also states that though the prescribed range for humidity should be **30-50%** but in our country most of the kitchen staff adjusts best between 50-60%

If temperature gets above **85 degree Fahrenheit & relative humidity 70%,** productivity falls rapidly. High temperature & high humidity have a tendency towards increasing accident rates

(both human & products), reluctance towards using standards & more evidence of short tempers & that is a most possible for a lot of tough practice between food & beverage service staff & food production staff all around the world. As a general rule, a comfortable worker is usually a more careful one.

Survey states that 50% of the heat that comes into the kitchen never finds its way into the food. It is poured into the air where it boils the cook not the food.

A solution to the kitchen is more & more application of the air conditioning of the kitchen. Those hotels & restaurants have air conditioned kitchens are getting 10-15% better productivity & better product line.

Insulation is also advisable & it reduces heat input into the fryer by 33% & reduces heat radiation into the kitchen even more. This is not the answer, there are other ways that heat loss into the kitchen air can be prevented or decreased if one will consider them:

• Insulated coffee urns

- Better venting of mechanical dishwasher
- Use of rapid heating, hard surfaced aluminum griddle

There should be adequate, even without shadows, minimum of ray glare & with proper contrast between the objects which the worker uses. Whatever the sources of light, care should be taken that the light reaches every place where a cook must select ingredients or utensils, read directions, determine doneness check for table readiness & inspect for cleanliness.

According to Richard Lambert (well known kitchen planning expert) soft, yellows are attractive to kitchen staff & seem to make the commis more productive.

The main thing to remember about color is to get away from the depressing effect of hospital white. While it may seem to give the feeling of absolute cleanliness & it also gives an oppressive walled –an effect that makes the worker feel that he can not wait to escape.

Too much sound in the kitchen also has enervating effects on the nerves of the food workers. If not properly controlled, noise is a leading cause of high sickness rates, mistakes & quarreling. When noise becomes excessive, it continues to build up as people will yell lounder & lounder to be heard over the hub-hub. Reports state that if noise level 80-90 decibel over a long time period, it causes deterioration in worker's performance. The acoustic tiles are better alternative to reduce the noise level, now a day acoustic paints are also available. Sound absorber enclosure with glass wool or other absorbents similar to that used around noisy motors & compressors in the kitchen area. Asphalt or similar undercoating can be used on the underside of the preparation tables. Soft tiles can be used on the floor. Heavy plastic dishes dull clatter and plastic dish rack also subdue noise. Refrigerator compressors can be located remotely. And usually most important of all, workers can be cautioned to talk rather than shout.

In the kitchen offensive odors should not be allowed to develop, but if by chance they do they should be quickly removed by proper ventilation, cleaning with oxidizing compounds, absorption by activated charcoal or as a last resort neutralization by counter –odorant.

In most facilities, good air turnover & circulation with in the work space are efficient enough that odor does not become a problem to the food service workers as it does in more close environment. Unpleasant odor can result in poor food intake, disturb sleep & even affect the mind. High humidity acts to intensify reaction to undesirable odors.

Man is a creature of habit. When a routine is impressed on him it becomes an almost automatic process for him & he can work more efficiently. Hence work area should be routine. when a man works he likes to do all his job as easily as possible in a logical habit pattern & with a minimum of physical interfere & mental disturbance. Generally speaking the operation should move from left to right (as the cook faces the equipment) because the majority of people are right – handed & in motion studied it has been found most efficient for workers to reach to the left for their raw material, operate on to it in front of them with both hands, and deposit the finished product to their right. Height of work table should be 37-39 inches where women work & for men 41

inches. Heavy work tables should not more than 36 inches where height. Each permanent work area should have definite places for every hand tool, condiment or utensils that they must be so available so that the worker can reach out blindly & grasp them. All items should be placed between waist & shoulder height directly in front of the worker, with those tools used by the left hand side of the work area on the left, & those used by right hand placed on the side. Particularly every thing used by the worker should be between 26 inches & 52 inches, from the floor.

Those items below waist height should be on pull-out & those things stored above eye level should be open work shelving, preferably tilted in ward. These provisions are desirable as human nature limits useful storage space to what the man can see from a standing position. In most cupboards of below waist height with fixed shelving, only 5-6 inches on the shelves can be used.

There are different **sizes of aisles & passage ways** varies from 2 feet to 15 feet, both these is merely extremes. In an aisles less than 36 inches a man can not band to get anything out of an under the counter closet. In fact, if a man has to kneel to do any job, he needs an aisle width of 45 inches. Where the aisles are excessively wide the operation has to be overstaffed to compensate for the excess walking, or the workers would be required to use excessive mechanical device. Of course, optimum results are obtained when you give the worker only the space he needs. Aisles should be straight with as few corners as possible. Cross aisles should be at right angles.

Now a days equipments are designed in such a manner that these fulfill the needs of the kitchen staff. A lot of human engineering is in the mind of the equipment manufacturers. It spite of all these facts we have to consider the following while designing, fabricating or selecting the equipments.

- Use a single indicating pointer is the least confusing. It should not cover any numbers in its movements & should be of color that contrasts sharply with the scale.
- All controls & displays should be above 32 inches from the floor & worker should not have to bend to reach any control from normal vertical body reach.
- There should be 10 gradations between numbers & contrast between numbers or letters and the background should be definite.
- Temperature control should be on the right hand side.

There is a grater need to understand that how much happier would be the cook when you are trying to work out the work space relationship. There are some designers which do not consider the cook's inter action with the food inside the cooking device & out. They seem to feel that cooking is a process that demands little more attention than placing the food into device; and that when the cook gets around to it, he takes the food out and it is in an optimum cooked condition.

Let us list the basic elements of motion economy, the grand-daddy of industrial engineering, so that you can see their applications to the subject we have been discussing.

- 1. Both hands should begin as well as complete their motions at the same time.
- 2. Hands should not be idle except rest periods.
- 3. Motions of arms should be made simultaneously and in opposite and symmetrical directions.
- 4. Motions sequence that has fewest basic divisions of accomplishments is best for performing a given task.
- 5. Hands should be relieved of all work which can be performed more advantageously by the feet or other parts of the body.
- 6. Tools, materials and controls should be located in an are around work space and as near the worker as possible.
- 7. Tools and materials should be pre-positioned to eliminate searching and selecting.
- 8. Tow or more tools should be positioned together, wherever possible.
- 9. Wherever applicable, height of work space and chair should be arranged so that sitting and standing at work is possible.

3.7 Steps for designing a Kitchen

- 1. Determine a basic menu design or pattern.
- 2. Estimate menu items to be prepared according to demand.
- 3. Consider food purchasing policies.
- 4. Ascertain the size, number and type to equipment needed to process the menu style and type of dishes chosen.
- 5. Compute from specification of equipment the amount of space required to house the space required.
- 6. Determine layout equipment departmentally according to food flow analysis and frequency of use.
- 7. The peak food purchasing requirement must be determined.
- 8. Determine and allocate floor space required for refrigeration and dry store purposes as a ration to total space available.
- 9. Estimate the dining room space by analysis peak patron loads and average seat turnover during these periods for any given restaurant.
- 10. Allocate service area space within the kitchen by considering menu, peak load requirements, patrons needs and type of service offered.

- 11. Determine number of employees needed and their distribution in the various departments from study of hours of operation land peak production and serving requirements.
- 12. Calculating the amount of space needed for work and traffic aisles by studying equipment layout and employee duties.

3.8 Summary

The principles of effective purchasing are based on the commitment of the organizational funds to those items which are in highest demand for that amount of money, so as to lead the establishment to profitability and success.

In catering, food constitutes the major variable cost and therefore purchasing decisions must be carefully made in consultation with user departments, sales and service to ensure efficiency.

Similarly A layout is based on a good work flow from the receipt of row materials at good entry to the dishes finally brought it servers for the guest. Over familiarity with processing sometimes inhibits radical thinking. A detached, analytical view is helpful. A work study specialist can provide such detachment of view, but a catering operation may be too small to employ work study staff full time or even to feel justified in engaging a consultant. Caterer who have studied in colleges are likely to have a 'process chart' (which breaks work into small parts called 'element'), fmls of movement, string diagrams (including work pathway) but many other study methods can also be used. Above all, an approach is needed which question. Planners should ask what is done? Why it is done, what should be done? similar questions to be posed relate to where? When? How? Why? & are lined which those about whether a task can be eliminated or combined or its consequence changed or simplified. Caterers themselves, can, in short, 'self help themselves to anticipate 'bottle-necks or other barriers to efficiency by using work study & work simplification procedures in planning or altering kitchens. In big operations, help from work study specialists can be reward.

3.9 Review Questions

- Q1 Elaborate on various principles of effective purchasing.
- Q 2 What are the various Principles of indenting for Volume Feeding.
- Q 3 Discuss in brief Kitchen Planning Work & Method Study
- Q4 What are the Points to be considered in Kitchen Planning
- Q 5 What are the various steps for designing a Kitchen

3.10 Suggested Reading

1. Jack D Ninemeire, Planning and Control for Food & Beverage Production (Sixth Edition)

- Albala, Ken (2011.) Food Cultures of the World Encyclopedia Greenwood. ISBN 978-0-313-37626-9
- 3. Zobel, Myron (1962.) "Global cuisine: being the unique recipes of the 84 top restaurants of the world." Patron Press.
- 4. Cooking Ingredients Christine Ingram (Hermes House) Year 2007
- 5. Theory of Cookery Krishna Arora (Frank Bros. & Co.) Year 2008
- 6. Food Production Operations Parvinder Bali (Oxford Publication) Year 2009
- 7. Larousse Gastronomique Hamlyn Publications Year 2009

UNIT 4

VOLUME FEEDING

- 4.0. Learning Objectives
- 4.1. Introduction
- 4.2. Types of Institutional & Industrial Catering
- 4.3. Problems associated with Institutional & Industrial Catering
- 4.4. Scope for development and growth
- 4.5. Hospital Catering
- 4.6. Characteristics of Hospital Catering
- 4.7. Quality Assurance System
- 4.8. Diet Menus
- 4.9. Food Labels
- 4.10. Summary
- 4.11. Concept Review Questions

4.0 Learning Objectives

By studying of this unit, you will be able to:

- Explain Institutional and Industrial catering.
- Enlist and explain problems associated with institutional & industrial catering.
- Explain scope for development and growth of institutional & industrial catering.
- Explain key features of hospital catering.
- Explain characteristics of hospital catering with reference to staff, visitors and patients.
- Define diet menu and pointers of menu planning for diet menu.
- Explain and compute nutritional requirements.

4.1. Introduction

Welfare it means no profit and no loss in our catering industry. Food & beverage outlets in welfare catering sector is commonly are commonly known as cafeteria, mess & some time dining room also. These outlets either operated by the owner of the institution/ industry or some time a contractor rendered their services to the institutes. These outlets offered a cyclic menu & not meant for general public. Style of service in these outlets is generally self-service but some

of the good institution provides silver/ pre plated / table service to their executives. A typical food and beverage operation in these outlets are as follows:

- 1. Diners either pay in cash to the cashier or procure a coupon according to their budget or few of the organizations distribute the coupons in advance to their employees.
- 2. After collecting the coupon she/ he move to the counter and pick up necessary crockery and cutlery and handed over the coupon to the counter assistant who portions the dish or diner serve themselves from the counter accordingly.
- 3. After collecting the food from the counter, move to the dining table where assistant may provide service of water or self service from the water cooler as the case and enjoy the meal.
- 4. After finishing she/ he have to clear by own.

Although the operations seems very simple but in reality it's a tough task to handle the welfare catering sector due to its volume of diners.

4.2. Types of Institutional & Industrial Catering

This group of establishments includes those government or educational institutions that have their own food production and service operations, thus serving employees and students. It is believed that the cafeteria of an organization is very important, as tasty and nutritious food play a huge role in employee motivation. Well-fed employees perform at their best and it inculcates a healthy work atmosphere. Some organizations (or institutes) operate their cafeterias at low profits or may charge nominal (or subsidized) rates because the aim is not to make money. Institutional establishments offer food services not necessarily to make profits but because it is a necessity. In many places, it is a legal binding on the organization to provide meal services.

Profit oriented- commercial canteens, restaurants, café, etc. within the premises catering to all the people (students, staff, visitors, etc.)
Running on break even- industrial canteens, college canteens catering to staff requirements only.

• *Subsidized*- serving meals as a part of employee/ student welfare schemes. Mostly Institutional and industrial catering are non-profit oriented.

Educational institutes include schools, colleges, universities, professional education institutions, hostels, etc. These can be broadly categorized into two types:

- 1. Academic Institutes
- 2. Professional Institutes.

AcademicInstitutions(SchoolsandColleges)1. The main consumers here are students. The food is made and supplied by cafeterias at very
nominalrates.

2. The cafeteria could have its own fully equipped kitchen, and thus prepare food or it may even outsource food. The size of kitchen and the kinds of equipment would depend on the number of meals the institution serves on dailv basis. а 3. The main focus is on health, hygiene, and nutrition. Since children need right kind of vegetables nutrients. seasonal are included in the meals. 4. Some schools monitor closely when serving students in dining halls as the focus is also on habits etiquettes developing good eating and among children 5. Considerations should be given to the physical, sociological and sociological atmosphere including both functional and aesthetic value of the Dining Hall. The location should provide plenty of light air and the place free from disagreeable odors, noxious fumes, noise, etc. **Professional** Institutes

1. The main consumers here are adults, and hence it is important to offer some variety to them. 2. Kitchens of these institutes are referred to as 'mess', which may be run by a committee called mess committee, or it could also be run with professional help from an outside agency. 3. Cyclic menus help to solve the issues of monotonous food. 4. The kitchen set-up can be basic to modem depending on the type and volume of meals that the institution cooks on a daily basis.

Success Story The Mid Day Meal

The Mid Day Meal is the world's largest school feeding programme reaching out to about **12 crore children** in over 12.65 lakh schools/EGS centres across the country.

Mid Day Meal in schools has had a long history in India. In 1925, a Mid Day Meal Programme was introduced for disadvantaged children in Madras Municipal Corporation. By the mid 1980s three States viz. Gujarat, Kerala and Tamil Nadu and the UT of Pondicherry had universalized a cooked Mid Day Meal Programme with their own resources for children studying at the primary stage By 1990-91 the number of States implementing the mid day meal programme with their own resources on a universal or a large scale had increased to twelve states.

1. With a view to enhancing enrollment, retention and attendance and simultaneously improving nutritional levels among children, the National Programme of Nutritional Support to Primary Education (NP-NSPE) was launched as a Centrally Sponsored Scheme on 15th August 1995, initially in 2408 blocks in the country. By the year 1997-98 the NP-NSPE was introduced in all blocks of the country. It was further extended in 2002 to cover not only children in classes I -V of Government, Government aided and local body schools, but also children studying in EGS and AIE centres. Central Assistance under the scheme consisted of free supply of food grains @ 100 grams per child per school day, and subsidy for transportation of food grains up to a maximum of Rs 50 per quintal.

2. In **September 2004** the scheme was revised to provide cooked mid day meal with 300 calories and 8-12 grams of protein to all children studying in classes I - V in Government and

aided schools and EGS/ AIE centres. In addition to free supply of food grains, the revised scheme provided Central Assistance for (a) Cooking cost @ Re 1 per child per school day, (b) Transport subsidy was raised from the earlier maximum of Rs 50 per quintal to Rs. 100 per quintal for special category states, and Rs 75 per quintal for other states, (c) Management, monitoring and evaluation costs @ 2% of the cost of foodgrains, transport subsidy and cooking assistance, (d) Provision of mid day meal during summer vacation in drought affected areas.

3. In **July 2006** the scheme was further revised to provide assistance for cooking cost at the rate of (a) Rs 1.80 per child/school day for States in the North Eastern Region, provided the NER States contribute Rs 0.20 per child/school day, and (b) Rs 1.50 per child/school day for other States and UTs, provided that these States and UTs contribute Rs 0.50 per child/school day.

4. In **October 2007**, the scheme has been further revised to cover children in upper primary (classes VI to VIII) initially in 3479 Educationally Backwards Blocks (EBBs). Around 1.7 crore upper primary children were included by this expansion of the scheme. From 2008-09 i.e w.e.f 1st April, 2008, the programme covers all children studying in Government, Local Body and Government-aided primary and upper primary schools and the EGS/AIE centres including Madarsa and Maqtabs supported under SSA of all areas across the country. The calorific value of a mid-day meal at upper primary stage has been fixed at a minimum of 700 calories and 20 grams of protein by providing 150 grams of food grains (rice/wheat) per child/school day.

5.During the year 2009 the following changes have been made to improve the implementation of the scheme:-

a) Food norms have been revised to ensure balanced and nutritious diet to children of upper primary group by increasing the quantity of pulses from 25 to 30 grams, vegetables from 65 to 75 grams and by decreasing the quantity of oil and fat from 10 grams to 7.5 grams.

b) Cooking cost (excluding the labour and administrative charges) has been revised from Rs.1.68 to to Rs. 2.50 for primary and from Rs. 2.20 to Rs. 3.75 for upper primary children from 1.12.2009 to facilitate serving meal to eligible children in prescribed quantity and of good quality .The cooking cost for primary is Rs. 2.69 per child per day and Rs. 4.03 for upper primary children from 1.4.2010.The cooking cost will be revised by 7.5% from 1.4.2011.

Community Participation The intention is to empower mothers of the children covered under the programme to supervise the preparation and serving of the meal and to exercise an effective vigil.

Mothers are encouraged to take turns to oversee the feeding of the children, thus ensuring quality and regularity of the meal. For this, they need to devote only a couple of hours once or

twice in a month.

This simple intervention of 'mothers watch', gives them a voice and a role and greater ownership of the programme.

Reports from Chattisgarh's Baster district indicate that the involvement of mothers "MITANIN" has not only led to a significant improvement in cooking and hygiene but also a change in attitude on the part of the teachers with the decline in absenteeism.

More and more States /UTs are including mothers in supervision committee as well. In Himachal Pradesh, mothers have been involved for supervision and duty rosters are being maintained. Similar rosters have been introduced in Madhya Pradesh. In Uttrakhand mothers are appointed as Bhojan Mata and Sahayika in all primary school.

The State governments are expected to roll out a mass mobilization campaign to involve mothers.

Effective mobilization would include :

- Preference to women in engagement of cooks cum helpers
- Orienting mothers towards their role in supervision of the preparation and cooking of meal.
- Bringing home to them the fact that their involvement, as the prime stake-holder, would substantially improve the regularity and quality of the meal.
- Sensitizing mothers to the critical aspects of the programme required to be supervised by them.
- Formalisation of ways of maintaining rosters to enable mothers to take turns on specified days of the year and participate effectively.
- Getting their suggestions on strengthening the programme strategies, to enhance community involvement, value addition to meals, etc.

Meal Provision

With a view to enhance enrolment, retention and attendance and simultaneously improving nutritional levels among children, the National Programme of Nutritional Support to Primary Education (NP-NSPE) was launched as a Centrally Sponsored Scheme on 15th August 1995, initially in 2408 blocks in the country. By the year 1997-98 the NP-NSPE was introduced in all blocks of the country. It was extended in 2002 to cover children studying in centres running under the Education Guarantee Scheme (EGS) and Alternative & Innovative Education (AIE) Scheme and Madarsas/Maktab. The scheme has been further extended to Upper Primary Schools in 2006-07. Since, 2009-10 the scheme covers children studying in National Child Labour Project (NCLP) Schools also.

Since its inspection, the scheme has been revised from time to time and the present provisions are as given below:-

- 1. Free supply of food grains @ 100 grams per child per school day at Primary and @ 150 grams per child per school day at Upper Primary.
- 2. Subsidy for transportation of food grains is provided to 11 special category states at PDS rate prevalent in these states and up to a maximum of Rs.75.00 per quintal for other than special categories States/UTs
- 3. In addition to foodgrains, a mid day meal involves major input, viz.,cost of cooking, which is explained below:

Cost of cooking includes cost of ingredients, e.g. pulses, vegetables, cooking oil and condiments as given below:-

Food norm with effect from 1-12-2009					
S. No.	Items	Quantity per day/	'Child		
5.110.		Primary	Upper Primary		
1	Foodgrains	100 gms	150 gms		
2	Pulses	20 gms	30 gms		
3	Vegetables (leafy also)	50 gms	75 gms		
4	Oil & fat	5 gms	7.5 gms		
5	Salt & condiments	As per need	As per need		

		Central-State S	Sharing		
Stage	Total Cost	Non-NER States (75:25)		NER-State	(90:10)
		Central	State	Central	State

Primary	Rs. 2.89	Rs. 2.17	Rs. 0.75	Rs. 2.60	Rs. 0.29
Upper Primary	Rs. 4.33	Rs. 3.25	Rs. 1.08	Rs. 3.90	Rs. 0.43

Revised Cooking	cost per chil	d per school day	w.e.f. 1.07.	2012	
		Central-State Sharing			
Stage	Total Cost	Non-NER States (75:25)		NER-State (90:10)	
		Central	State	Central	State
Primary	Rs. 3.11	Rs. 2.33	Rs. 0.78	Rs. 2.80	Rs. 0.31
Upper Primary	Rs. 4.65	Rs. 3.49	Rs. 1.16	Rs. 4.19	Rs. 0.47

Revised Cooking cost per child per school day w.e.f. 1.07.2013						
		Central-State Sharing				
Stage	Total Cost	Non-NER States (75:25)		NER-State (90:10)		
		Central	State	Central	State	
Primary	Rs. 3.34	Rs.2.51	Rs. 0.83	Rs. 3.01	Rs. 0.33	
Upper Primary	Rs. 5.00	Rs. 3.75	Rs. 1.25	Rs. 4.50	Rs. 0.50	

4. Engagement of cook-cum-helpers

a) A separate provision for payment of honorarium to cook-cum-helper @ Rs. 1000/per month has been made. One cook-cum-helper may be engaged in a school having upto 25 students, tow cooks-cum-helpers for schools having 26 to 100 students and one additional cook-cum-helper for every addition of upto 100 students.

b) The expenditure towards the honorarium of cook-cum-helper is shared between the Centre and the NER States on 90:10 basis and with other States/UTs on 75:25 basis.

5. Management, Monitoring and Evaluation (MME).

Provide assistance to States/ UTs for Management, Monitoring & Evaluation (MME) at the rate of 1.8% of total assistance on (a) free food grains, (b) transport cost (c) cooking cost and (d) Honorarium to cook-cum-helpers. Another 0.2% of the above amount will be utilized at the Central Government for management, monitoring and evaluation. The

detailed guidelines issued by the Ministry vide letter No. F.1-15/2009-Desk(MDM) dated 21st June, 2010.

6. Provision of mid day meal during summer vacation in drought affected areas.

7. Provision of essential infrastructures:a) Kitchen-cum-stores :-

The cost of construction of Kitchen-cum-store is determined on the basis of State Schedule of Rates and the plinth area norm laid down by the Department of School Education and Literacy, Ministry of Human Resource Development, Government of India depending on the number of children studying in schools. However, in case of unconventional item, which do not part of Schedule of Rates, the rates is approved by the State level Steering-cum-Monitoring Committee for MDM Scheme with the condition that such estimates should not exceed the cost of the similar design made through conventional item available in the Schedule of Rates. The cost of construction of Kitchen-cum-store is shared between the Centre and the NER States on 90:10 and with other States /UTs on 75:25 basis. The norm for construction of kitchen-cum-store is given below:- 20 sq. mts. plinth area for construction of Kitchen-cum-store in schools having up to 100 children. For every additional up to 100 children additional 4 sq.mt. plinth area will be added. Slab of 100 children may be modified by the States/UTs depending upon local conditions. For example, the hilly areas, where the number of children in schools is less, may have larger slabs. In one State/UT, there can be more than one slab. However, the modified prescription of plinth area will have to conform to the above ceiling.

b) Kitchen Devices:-

Provide assistance in a phased manner for provisioning and replacement of kitchen devices at an average cost of Rs. 5,000 per school. States/ UT Administration will have the flexibility to incur expenditure on the items listed below on the basis of the actual requirements of the school (provided that the overall average for the State/ UT Administration remains Rs 5000 per school): a. Cooking devices (Stove, Chulha, etc) b. Containers for storage of food grains and other ingredients c. Utensils for cooking and serving.

Industrial catering refers more to shops and factories where food is made to primarily serve the needs of the employees. This is one of the most sensitive catering, as it is believed that it is important to keep employees happy by providing them tasty, nutritious, and a variety of food. 1. The food is served in dining halls, often referred to as cafeterias or employee dining halls. 2. In many companies, members of the senior management eat in the same dining halls along

with other employees. However, in some companies, the members of senior management have food in a separate area sometimes referred to as EDR or *Executive Dining Room*.

3. The number of meals served may range anywhere from 30 to 2,000 or more, and this depends on the size of the organization, that is, the number of employees.

4. Industrial catering is a crucial and a sensitive one too because it caters to a large group of people with multicultural and different religious beliefs.

5. The food is nutritionally balanced for the type of work. Example, industrial workers performing heavy physical work need a high calorie diet.

6. In India, we also have specialized celebrations done on major festivals in cafeterias, and the food cooked on such occasions reflects the specialities from that festive season.

7. The cafeterias have tea/ coffee facilities, with some also having snack and beverage vending machines.

Catering for armed forces is also sometimes referred to as welfare catering. This service is provided to armed forces as a subsidy from the government, and soldiers posted at various locations are fed under this scheme.

1. Such an operation could be a large or a small one, depending on the number of soldiers. The services could either be contracted or run by the soldiers on a rotational basis, where a person designated as mess in-charge takes care of the food and service.

2. The army mess provides simple and nutritious food, and on some occasions, such as army day or any festivals, there is a lavish buffet or feast. In Indian army, bara khaana or the big feast day is celebrated with buffet for soldiers and their families.

3. Some formal dining events are held for officers and their families and these too are catered by the army mess.

Menu Considerations in Institutional & Industrial Catering:

- Cyclic menu for regular meals and limited choice in canteens.
- Nutritional requirements are kept in mind while planning menu.
- Reasonable prices consistent with service offered.
- Menus are relatively simple, which can be prepared by limited kitchen staff in limited time.
- Special menus are prepared for special occasion like on festivals, functions and parties.

Guide Table for Institutional Catering

Portion size and portion control equipment for common food items

Item	No. of portions	Portion Control Equipment
One Kgm of salad	15-20	Scoops: for ice cream and mashed potatoes
1 Kgm Lamb / Mutton/ Fish	8-10	Ladles: for soups and sauces

1 kgm of chicken	5-6	Butter pat machines: for regulating butter pats 7 gm onwards
1 Kg Vegetable	6-8 Dry	Fruit juice glasses: 75-150 ml
1 Kg Vegetable	8 -10 Curry	Soup plates: 6-8 Oz
1 Kgm Paneer	10-12	Milk dispensers : for dispensing of milk
1 Kg m Dal	25-30	Tea measuring machines
1 Kgm Rice	8-10	Pie dishes
1 Kgm Curd	15-20	Pudding basins
1 Kgm Flour	Phulka 30 Nos, Taandoori Roti 12-14, Tandoori Paratha 12-14, Malabari Paratha 10 Nos, Roomali Roti 10 Nos, Naan 10 Nos, Loochi 55-60 Nos	Moulds
Sweet made with one Liter of milk	Rabri 6 serving, Kheer 5-6 serving, Doodh pak 6 serving, Payesh 8 serving, Payasam 8-10 serving,	Coupes

4.3. Problems associated with Institutional & Industrial Catering

• Blending nutritional aspect with taste is little difficult. E.g. porridge is a healthy food but most of the people do not like it.

• Portion control and it was found that 0.007 litre of milk was being lost per cup spilling it from a jug. 32 000 cps= 224 litres of milk lost daily, this resulted in a loss of thousands of rupees per year.

When an extra 10 gm of meat is served on each plate it means a loss of 100 kg and may cost Rs. 25,000 a day when 1000 meals are served daily and may account for Rs. 25,000 x 365 per annum.

• People eat in varied proportions, for example men eat more than women, people doing physical labour eat more than those doing office work.

• Staff serving food finds it difficult to meet the expectations of consumers. E.g.-everyone cannot be given a leg piece of chicken etc.

- Also a large number people are to be fed in a limited time.
- High standards of cleanliness and sanitation.
- Arranging adequate facilities and managing them is a challenge, like space of dining hall, seating arrangements, food and water service, etc.

• Chef has work within tight budgets and yet has to meet the high expectations of consumers.

Summary of factors which affect the profitability of establishment:

- Over cooking food resulting in portion loss.
- Inefficient preparation of raw material.
- Poor portion control.
- Menu fatigue.
- Too much wastage, inefficient use of raw materials, left- over food not being utilised.
- Inaccurate ordering procedures.
- Inadequate checking procedures.
- No reference mark to standardised recipes and yield factors.
- Insufficient research into suppliers.
- Inaccurate forecasting.
- Bad menu planning.

4.4. Scope for development and growth

There are various organizations which provide catering services such as armed forces, hospitals, jails, prisons, charity homes, senior citizen home, old age home, orphanage house. It has been found that there are thousands of the organizations in our country those spends billions of rupees annually to cater their employees. For example: In BHEL Haridwar, more than thousands of meals are prepared on daily basis, Indian Oil Corporation Mathura refinery spends crores of rupees annually for meals of their employees. The most challenging part of the welfare catering sector is to feed the mass in a very limited and specified time and every employee of the organization has his/ her expectations and you have to come out with their expectations.

There is a tremendous potential & greater carrier opportunities for young scholars in welfare sector as most of the institutions are operating their dining services to cater thousands of employees & provide the best meals. Almost all good companies are having their own guesthouses & are providing best accommodation facilities to their business clientele, experts & executives. A new concept of lease has been observed in last ten years in the welfare catering market. As in earlier years the catering service was either operated by the institutes/ or by the contractor but now a days it is managed by the professional groups and elite international corporate houses, especially in the multinational companies, big hospitals, public sector industries and offices. Sodexho from France, RKG are the prime players to cater the need of the welfare sector and they develop the new concepts of food vouchers/ food gift coupons to the employees of these organization. As earlier the menu was very low price and fixed and most of the time cost has been born by the industry/ institute in the form of subsidy but after entering the

professionals, the shape of the welfare sector has been a change and most of the institutions have a la carte menu, more one food and beverage outlets and have franchised with the leading fast food players to cater the services to their employees.

The most challenging part of the welfare catering sector is to feed the mass in a very limited and specified time and every employee of the organization has his/ her expectations and you have to come out with their expectations.

TajSATS Air Catering Ltd.

A joint venture of the Indian Hotels Company, popularly known as the Taj Hotels Resorts and Palaces, and SATS (formerly known as Singapore Airport Terminal Services). The Taj Hotels Resorts and Palaces is part of the Tata Group, India's largest business conglomerate. The Tata Group has 98 companies spread across 80 countries in 6 continents. SATS, is a leader in airline catering and ground handling services in Asia. TajSATS is the market leader in airline catering. The company provides in-flight catering at Mumbai, Delhi, Chennai, Kolkata, Amritsar, Goa and Bangalore and manages Airport Lounges in Mumbai and Chennai.We have bagged the contract for Management of the lufthansa lounge (Star Alliance) and Emirates lounge in Mumbai International Airport. The Taj Madras Flight Kitchen operates airport restaurants in Chennai. The company is a venture joint of the Indian Hotels, and Malaysian Airlines. SATS All these facilities are equipped with state-of-the-art technology and advanced kitchen equipment for efficient and hygienic food production and handling. At the heart of our offering is a commitment to be 'One with the Customer'. We are focused on creating affinity with our customers every single day. We believe in strengthening this delighting relationship by the customer in everv interaction. TajSATS is also looking at future expansion in cities Nagpur, Ahmedabad, Calicut & Cochin. We have kept pace with the developments that have taken place in the Indian aviation industry and we are geared to face whatever the future brings. While catering to the ever increasing needs of our demanding business, we have simultaneously expanded from an Indian catering service to an International one.

4.5. Hospital Catering

The hospital catering is classifies as welfare catering, the object being assist the nursing staff to get the patient well as soon as possible. To do this it is necessary to provide good quality food which has been carefully prepared and cooked to retain the maximum nutritional value, and presented to the patient in an appetising manner. It is recognised that the provision of an adequate diet is just as much as a part of the patient's treatment as careful nursing and skilled medical attention.

Within the health service approximately 12 million meals are served every day and the number served in one establishment can vary from 50 to 3000 people. In many hospitals patients are provided with a menu choice. The staff in hospital catering service are organised as follows:

Catering managers plan menus, obtain supplies and supervise the preparations, cooking and service of the meals, and are also responsible for training and safety. They visit the wards to advise on the service of food to the patients, and control the provision of catering facilities for the doctors, nurses and other hospital visitors.

Assistant catering managers assist and deputise for the catering managers with all or part of their duties, or they may be responsible for a small hospital.

Catering supervisors have responsibility of dining rooms that is hospital staff (doctors, nursing staff and other hospital staff) as well as visitor's cafeteria. They are responsible to the catering manager.

Kitchen superintendents are responsible to the catering manager or assistant catering manager for running of one or more hospital kitchen.

Cooks are graded: 1- assistant cook, 2- assistant head cook, 3- head cook. The head cook would be in-charge of a kitchen under the control of kitchen superintendents or assistant catering manager.

People interested in being service to the community and gaining job satisfaction could find this aspect of catering rewarding. Conditions, hours of work and pay as well as promotion prospects are factors which contribute to making this a worthwhile career.

4.6. Characteristics of Hospital Catering

a. Dieticians: In many hospitals a qualified dietician is responsible for:

- Collaborating the catering manager on the planning of meals
- Drawing up and supervising special diets
- Instructing diet cooks on the preparations of special dishes
- Advising catering manager and assisting in the training of cooks with regard to nutritional aspects
- Advising patients

b. The Main Hospital Kitchen: All food, except diets and food cooked in the ward kitchens, is cooked here. In this kitchen all meals for patients, doctors, nursing staff, clerical, maintenance staffs are prepared. In hospitals where a cafeteria or canteen is provided for out- patients and visitors this will come under the control of assistant catering manager.

c. Hospital Routine: Hospital catering has its own problems, which often make it very difficult to provide correctly served meals. Wards are sometimes spread over a wide area, and, in large hospital, where there are long distances for the food to travel, provision of effective, silent trolleys is essential to keep the food hot.

The routine of a hospital is strictly timed and meals have to fit in with the duties of nursing staff.

The amount of money the catering manager has to spend on food and beverage is stated as so much per head. Good, wholesome varied meals can only be provided by careful buying and the elimination of waste. The cost of providing the hospital catering service is reviewed by the Government.

Facilities at Apollo Hospitals, Chennai, India

Apollo Hospitals is deeply committed to the highest standards of excellence in medical care. At the same time we place a lot of importance on the traditional values of hospitality and compassionate patient care. Our primary concern is to ensure that your health and comfort receives special attention and that you are given the best possible care once you enter the portals of our hospital.

We give you here a few details about our hospital so that your experience at our hospital is comfortable and pleasant. If you are visiting Apollo for the first time, you need to register. You will be issued a UHID number and a hospital record file. A comprehensive range of facilities ensures that all the expertise necessary for your well-being is made available.

For room reservation please contact the Admission Counter along with the doctor's admission request. In case of emergency, you will be first admitted in the Emergency unit and later shifted to the room.

A cot or a couch will be provided in your room to facilitate the stay of your attendant. In the General Wards, a reclining chair is provided.

For children under 5 years two attendants will be allowed.

When a patient is shifted to CT ICU / CCU the attendants may vacate the room and avail the services of the waiting hall which is located at the basement of the main block.

Patients availing credit facility have to provide an authorization / credit letter from the company, which should be handed over at the admission counter during the time of admission.

Apollo Suite – Apollo suite comprises three luxuriously appointed air-conditioned rooms, including a dining room and a waiting room. It has a patient cot, an attendant cot, two televisions, sofa sets, two telephones, refrigerator, a dining table, computer with internet wardrobe. microwave connection. oven and а massage chair. Suite Room – A suite comprises well-furnished air-conditioned rooms including the dining room and the waiting room. It has a patient cot, an attendant cot, one television, sofa sets, a telephone, refrigerator, wardrobe, computer with internet connection, microwave oven and a dining table.

Executive Room - This is a large air-conditioned room with television, telephone, refrigerator, sofa set, wardrobe, a patient cot, an attendant cot, computer with internet connection, microwave oven and a dining table. *Deluxe Room* - This is an individual air-conditioned room larger than a single room. It comprises a patient cot, an attendant cot, television, telephone, refrigerator, cupboard and sofa.

Single Room - This is an individual air-conditioned room with attached washroom located on a specially designated floor. This room has a television, telephone and a couch. *Semi-Private Room* - Two Air-Conditioned rooms inter-connected by a washroom. Each room has a television, telephone and a couch.

Double Sharing Room - This is an air-conditioned room with 2 beds separated by a screen and a washroom. This has a television, telephone, and a couch.

Special General Ward - This is a room with 3 beds and a washroom and an attendant couch.

General ward - This is similar to a dormitory with 6 to 10 beds and a common washroom. Every bed is provided with a cupboard, footstool, food trolley, a screen between each bed and a washroom.

Apollo Hospitals Chennai provides exclusive custom-built services for patients being admitted for Hip Surgery. The facility, at Apollo Speciality Hospitals, Chennai, India offers the following facilities:

- Private suite with fully automated cot
- Easy access to Bath/ toilet which is customised for Hip Surgery patients
- Wall mounted plasma TV with 50 channels & (Over 1,000 English DVD movies available for rent)
- All suites equipped with Laptops having cordless wi-fi internet connection so that it can be operated from the bed
- Extra couch for an accompanying person to sleep
- Kitchenette with microwave/ refrigerator/ Coffee maker
- 'Hip corridor' for patients to practice walking after surgery
- Lounge to relax or receive visitors. This has an attached mini library
- Overseas patients office is situated within this facility for easy interaction and availability

Food and Beverage Facilities

The Dietitian plans the diet based on the therapeutic needs of the patient. Local specialties, Continental and Chinese cuisine are available and any special dietary requirements will be met. The Guest Dining Hall is situated in the basement, where breakfast, lunch and dinner are available. Room service is also available. A 24-hour coffee shop is situated at the groundfloor.
4.7. Quality Assurance System for a Hospital Catering Department

- 1. Efficiency standard;
- 2. Quality standard;
- 3. Overall performance of catering department.

A QAS is created on the basis of principle stages in catering management, presented as a flow chart in Figure 1.



Fig. 1. Quality Assurance System for a Hospital-Catering Department

Actual specification (standards, quality, and performance) is checked against control specification specified in the catering contract service agreed between catering contractors and hospital manager. Performance evaluation is expressed as performance level (PL). The recommended items for control in each stage of catering processing are:

Stage I: Quality index by standards specification for raw materials, ingredient, and additives.

Packaging, distribution and storage conditions, Purchasing price evaluation

Stage II: Good Manufacturing Practices (GMP) for each operation, correlate with destination

Good Hygiene Practices (GHP) for each operation, correlate with destination , Quality and dose of ingredients, additives and Portion yield

Stage III: Time – temperature - Portion size - Destination control in direct correlation one with each other parameters. GMP for the nature of catering product Good Hygiene Practices for the cooking methods Portion yield Appearance, color, taste for cooked product

Stage IV: Time-temperature control, Size of hot/cold stock (stock level), Stock rotation, Good Hygiene Practices

Stage V : Quality of catering product (appearance, color, taste, presentation) Portion yield Temperature of serving , time of serving, Packaging Control, Distribution control, Good hygiene practices.

Stage VI: Sensorial Quality evaluation of catering product (appearance, color, taste, size)

Quality evaluation of service procedure and Price evaluation

An efficiently QAS in hospital catering services give the best results in terms of quality and price, avoid toxic infection problems and due to the best collaboration between hospital managers and catering contractors.

4.8. Diet Menus

In nutrition, **diet** is the sum of food consumed by a person or other organism. **Dietary habits** are the habitual decisions an individual or culture makes when choosing what foods to eat. The word diet often implies the use of specific intake of nutrition for health or weight- management reasons (with the two often being related). Although humans are omnivores, each culture and each person holds some food preferences or some food taboos. This may be due to personal tastes or ethical reasons. Individual dietary choices may be more or less healthy.

Proper nutrition requires ingestion and absorption of vitamins, minerals and food energy in the form of carbohydrates, proteins and fats. Dietary habits and choices play a significant role in the quality of life and longevity It can define cultures and play a role in religion.

Some cultures and religions have restrictions concerning what foods are acceptable in their diet. For example, only Kosher foods are permitted by Judaism, and Halal foods by Islam. Although Buddhists are generally vegetarians, the practice varies and meat-eating may be permitted depending on the sects.

A particular diet may be chosen to seek weight loss or weight gain. Changing a subject's dietary intake, or "going on a diet", can change the energy balance and increase or decrease the amount of fat stored by the body. Some foods are specifically recommended, or even altered, for conformity to the requirements of a particular diet. These diets are often recommended in conjunction with exercise. Specific weight loss programs can be harmful to health, while others may be beneficial (and can thus be coined as healthy diets). The terms "healthy diet" and "diet for weight management" are often related, as the two promote healthy weight management. Having a healthy diet is a way to prevent health problems, and will provide your body with the right balance of vitamins, minerals, and other nutrients.

An eating disorder is a mental disorder that interferes with normal food consumption. It is defined by abnormal eating habits that may involve either insufficient or excessive diet. A healthy diet may improve or maintain optimal health . In developed countries, affluence enables unconstrained caloric intake and possibly inappropriate food choices.

It is recommended by many authorities that people maintain a normal weight by (limiting consumption of energy-dense foods and sugary drinks), eat plant-based food, limit red and processed meat, and limit alcohol. However, there is no total consensus on what constitutes a healthy diet.

Balanced diet: is one that gives your body the nutrition it needs to function properly. In order to get truly balanced nutrition, you should obtain the majority of your daily calories from fresh fruits and vegetables, whole grains, and lean proteins.

Calories: The number of calories in a meal is a measure of the amount of energy stored in that food. Your body uses calories from food for walking, thinking, breathing, and everything else it does. The average person needs to eat about 2,000 calories every day to maintain his or her weight.

A person's daily calorie intake should be based on age, gender, and physical activity level. Men generally need more calories than women, and active people need more calories than sedentary (inactive) people.

The following examples of calorie intake are based on U.S. Department of Agriculture (USDA) guidelines:

- Children ages 2 to 8: 1,000 to 1,400
- Active women ages 14 to 30: 2,400
- Sedentary women ages 14 to 30: 1,800 to 2,000
- Active men ages 14 to 30: 2,800 to 3,000
- Sedentary men ages 14 to 30: 2,000 to 2,600
- Active men and women over 30: 2,200 to 3,000
- Sedentary men and women over 30: 1,800 to 2,200

The source of your daily calories is just as important as the number of calories you consume. You should limit your consumption of "empty calories," or those that provide little or no nutritional value. The USDA defines empty calories as calories that come from sugars and solid fats, such as butter and shortening. A balanced diet is important because your body's organs and tissues need proper nutrition to work effectively. Without good nutrition, your body is more prone to disease, infection, fatigue, and poor performance. Children with a poor diet run the risk of growth and developmental problems. Bad eating habits can continue for the rest of their lives.

Rising levels of obesity and diabetes in the world are prime examples of the effects of poor diet and lack of exercise. The USDA reports that four of the top 10 leading causes of death in the world are directly influenced by diet. These are:

- Heart disease
- Cancer
- Stroke
- Diabetes

At the core of a balanced diet are foods that are high in vitamins, minerals, and other nutrients and low in unnecessary fats and sugars. The following are essential parts of a balanced diet.

Fruits: Besides being a great source of nutrition, fruits make quick and tasty snacks. Choose fruits that are in season in your area—they are fresher and provide the most nutrients.

Vegetables: Vegetables are primary sources of essential vitamins and minerals. Dark, leafy greens generally contain the most nutrition and can be eaten at every meal. Examples include spinach, kale, green beans, broccoli, and collard greens.

Grains: we consume refined white flour more than any other grain. During the refining process, the hull of the grain—the outer shell—is removed. Unfortunately, the hull is where the majority of the grain's nutrition lies. Whole grains, which are prepared using the entire grain, including

the hull, provide much more nutrition. Try switching from white to whole-grain breads and pastas.

Proteins: Meats and beans are primary sources of protein, which is essential for proper muscle and brain development. Lean, low-fat meats such as chicken, fish, and certain cuts of beef and pork are the best option. Removing the skin and trimming off any visible fat are easy ways to reduce the amount of fat and cholesterol in meats.

Nuts and beans, such as lentils, peas, almonds, sunflower seeds, and walnuts, are also good sources of protein. Tofu, tempeh, and other soy-based products are excellent sources of protein and are healthy alternatives to meat.

Dairy: Dairy products provide calcium, vitamin D, and other essential nutrients. However, they are also major sources of fat, so it is best to choose reduced-fat or fat-free cheeses, milk, and yogurt.

Oils: Oils should be used sparingly. Opt for low-fat versions of products that contain oil, such as salad dressing and mayonnaise. Good oils, such as olive oil, can replace fattier vegetable oil in your diet. Avoid foods that have been deep-fried in oil because they contain a large number of empty calories.

4.9. Food Labels

Food labels contain a variety of information including:

- This provides information on the amount of energy, protein, fat (total and saturated), carbohydrates (total and sugar) and sodium (this is an indication of the amount of salt). This information will help you to make an informed decision about what food to buy. Choose foods that are low in fat (especially saturated fat), sugar and sodium. By using the "per 100g" column of the nutrition information panel you can compare and choose the healthier option of two similar foods.
- Ingredient list all of the ingredients contained in the food are listed in order of weight. You can use this to see how much sugar is contained in a product relative to other ingredients by how high it is in the ingredient list. Try to avoid choosing foods where sugar is one of the first few ingredients in the list.
- Percentage labelling this tells you how much of the characterizing ingredients are in your product. For example, percentage labelling will tell you what percentage of the strawberry yoghurt is made up of strawberries.
- Food Additives food additives, including colours, flavours and preservatives will be included in the ingredient list in the form of numbers. If you are sensitive to a particular

additive, and know its identifying number, this will help you to avoid foods containing the offending additive.

- Country of Origin in India, the label of any packaged food must state the country that the food was made or produced in.
- Directions for use and storage these include specific instructions such as "refrigerate after use". When followed, these instructions help to maintain the safety and quality of the food.
- Information for allergy sufferers products containing the major allergens, peanuts, tree nuts (e.g. almonds, cashews, walnuts), shellfish, milk, eggs, sesame, soybeans and gluten, are labelled as "may contain". If you have an allergy to any of these foods or food components, it is strongly recommended that you avoid all foods containing these products.
- Date marking do not buy or consume foods after their "use-by" date. However, food is still safe for consumption after its "best before" date.

4.9. Summary

Welfare sector included schools, colleges, institutions, halls of residence, hostels, hospitals, etc where all the meals are provided. It is essential that in these establishments the nutritional value and balance of food is considered, and should satisfy all the resident's nutritional needs, as in probability the people eating here will have no other food. Since many of these establishments cater either for students or patients, and the age group which leads a very energetic life or required special diets. Either people usually have large appetites or less appetites. All the more reason that the food should be well cooked, plentiful, varied, nutritious, healthy and attractive.

4.10. Concept Review Questions

- a. Differentiate between Institutional and industrial catering.
- b. Explain characteristics of hospital catering.

c. Explain problems associated with Institutional & Industrial Catering and discuss scope for development and growth of Hospital catering in India.

- d. Explain Quality Assurance System with the help of a neat diagram.
- e. what do you mean by diet menu and discuss importance of food labels.

4.11 Suggested Reading

1. Jack D Ninemeire, Planning and Control for Food & Beverage Production (Sixth Edition)

- Albala, Ken (2011.) Food Cultures of the World Encyclopedia Greenwood. ISBN 978-0-313-37626-9
- 3. Zobel, Myron (1962.) "Global cuisine: being the unique recipes of the 84 top restaurants of the world." Patron Press.
- 4. Cooking Ingredients Christine Ingram (Hermes House) Year 2007
- 5. Theory of Cookery Krishna Arora (Frank Bros. & Co.) Year 2008
- 6. Food Production Operations Parvinder Bali (Oxford Publication) Year 2009
- 7. Larousse Gastronomique Hamlyn Publications Year 2009

UNIT 5.

Off Premises Catering

- 5.0. Learning Objectives
- 5.1. Introduction
- 5.2. Off premises catering model
- **5.3.** Challenges in off premises catering
 - **5.3.1.** Difference between off premise and on premise catering
 - **5.3.2.** Merits and Demerits of Off Premises Catering
- 5.4. Qualities of off premises caterer / administrator
- 5.5. Managing off premises catering business
- 5.6. Tips to follow to be a successful off premises caterer
- 5.7. Logistic management in off premises catering
- **5.8.** Site selection or Function Catering Premises
- 5.9. Pointers for off premises kitchen layout
- **5.10.** Setting of Beverage stations (BARS)
- 5.11. Sample Checklist of equipment and supplies
- 5.12. Rental Equipment Order Form
- **5.13.** Guide table for computing Food quantities
 - **5.13.1.** Guide table for % overage
 - **5.13.2.** Guide table for cocktail party
 - 5.13.3. Guide table for liquor, wine, beer, and mixer quantities
- 5.14. Packing List
- 5.15. Pointers for loading and delivery of vehicle
 - 5.15.1. Unloading at party site
 - 5.15.2. Reloading and returning
- 5.16. Execution of a wedding event
- 5.17. Transport Sector
- **5.18.** Recreation and Leisure
- 5.19. Career Information
- 5.20. Summary

- 5.21. Case study
- **5.22.** Key words and concepts
- **5.23.** Concept review questions
- **5.24.** Test your knowledge

5.0. Learning Objectives

After studying of this unit, you must be able to:

- Explain key characteristics of off premises catering.
- Explain qualities of off premises caterer / administrator
- Explain guidelines for success in off premises catering.
- Explain logistic management of off premises catering.
- Explain Pointers for loading and delivery of vehicle.

5.1. Introduction

Off premises catering is very similar to a sports team playing all its game away from home, in unfamiliar surroundings, with none of the comforts of home to ease the way. There is no home field advantage but thousands of potential landmines. Off premises catering is serving food and beverages at a location away from the production and service unit of the service providers (caterer/ company). In off premises catering service providers can not find any existing kitchen facility and they are required to set a satellite kitchen according to need of the functions. Off premises caterers meet the needs of all market segments from low budget to upscale client with an unlimited budget who wants the highest level of service, ultimate in food quality and luxurious linens.

Off premises catering is a unique combination of art and science: art is creating foods and moods as the caterer and client together turns a vision into reality. The science is the business of manpower, material and money. Successful caterers work in both the aspects and earn name and generate profit. Different types of caterers provide various types of off premises services:

Party food Caterers prepare food at their base kitchen and last minute preparations for the site.

Hot food caterers deliver hot foods from their commissaries in insulated containers.

Full service caterers prepare the food at site on order and provide service personnel for the event. All the necessary food preparations and service related equipment- chinaware, flatware, glassware, tables, chairs and so forth are arranged by them. Full service caterer can plan an event, not just the food for it.

5.2. Off Premise Catering Model

Describes how managerial philosophies and techniques, laws and sanitation and safety interrelated in the off premises catering business. Model also depicts how planning for marketing, menu, site selection, logistic affect the preparation, party and finally output in terms of word of mouth publicity, profit or losses and cash flow and accounting.





5.3. Challenges in off premises catering:

There is only one chance to get it right. You can quote many events occur only once in a life time such as wedding reception, farewell, and so on and other events are scheduled annually, quarterly or on a regular basis and as a caterer you fails to execute all details of an such event to the satisfaction of the client will seldom have another chance. Think about various situations before proceed:

- You are ready with the delivery but driver of catering van inform you that he will be late due to traffic jam or any maintenance job.
- Wrong menu items were dispatched by you for the event and you are informed when the bride and groom are ready for their guests to be served.
- Chef / server drop the container with full of food while filling the chefing dish and guest is waiting to dine.

- Table numbers have vanished and the guests are ready to be seated.
- Police arrives at a party venue 20 minutes before the event start and refuges to allow guest's access to the party because venue is not authorized for party.
- Guest is asking to pack the meals for their families as they were unable to join the party for some reasons.

These are the very few examples of the various challenges face by the off premises caterers on their daily routine life but you have to be mentally prepared to deal with all such odd situations. To be a successful party caterer must be an individualist full of novel ideas and be able to operate profitably and attractively for the client. Every party whether for 20 or 20,000 must be specially and different from anything that has gone before usually clients asked to organize a party which is different, something that there friends and relations will remember for a long time. There are no set standards for this specialized section of catering and procedures vary from job to job, place to place according to requirements of the occasion, facilities, and standard required and the budget.

Five Keys For Success In Off Premise Catering

In his book, "Positively Outrageous Service" T. Scott Gross outlines five keys for success in off premises catering:

- Be a quality fantastic
- Look your ways to say yes to your customer.
- Do the right things
- Be a visible standard of excellence.
- Manage first; labor second

5.3.1. Difference between off premise and on premise catering

Key words	Off premise catering	On premise catering
Cost (for the guest)	Expensive due to the various costs involved: rental cost of equipment, venue, transportation, labor, décor and lighting etc	Less expensive
Level of Uncertainties	Very high	Very low
Scope of Creativity	Very high	Moderate
Turn over of manpower	Very high due to work is on –"as needed basis".	Moderate

Scope of planning	Very high	Low
Number of peoples to be served	Unlimited	Limited
Requirement of Investment and infrastructure (for the caterer)	Low	Very high

5.3.2. Merits and Demerits of Off Premises Catering

Merits of off premises catering

Advance deposits are taken by the off premises caterers and seems the customary of this business and this deposit provides security to the caterer. And in case of cancellation, most of the caterer doesn't refund the advance and use to make their assets.

- Off premises business can start with Limited start –up investment and most of the caterers have very small kitchen and operating from their home office and rest of the items are procured on rental as and when require by them.
- Caterer does not require maintaining a large store and business can start with very *Limited inventories.*
- Cost of food and supplies are very **controllable costs** because of the nature of the business (advance information about the function).
- Off premises caterer can generate *Additional revenues* by providing additional services such as rental equipment, service personnel, décor, music, entertainment.
- Business by contract
- Direct payment
- As most of the parties are booked either months or weeks in advance so advance forecasting helps to generate the business. In our country as we have two seasons for Hindu marriages so caterer can plan themselves accordingly.
- Most of the business comes from *free word of mouth advertising* as satisfied guest at one party will either directly or indirectly book another party.
- Selectivity

Demerits of off premises catering:

- Very high level of stress during season.
- Demand of very high energy level
- Seasonality of the business
- Inconsistent revenue

5.4. Qualities of off premises caterer / administrator

To become a successful off premises caterer or administrator, you must possess the following qualities:

- > Work experience (in food preparation and food service)
- Passion
- An entrepreneurial nature
- Basic business knowledge
- > Ability to plan, organize, execute and control
- Ability to communicate with clients and staff
- Ability to meet the needs of the clients
- Ability to project a favorable image
- Willingness to take calculative risks
- Sound body and mind
- Sense of humor
- ➤ Creativity
- Dependability
- > Open-mindedness

"Vision is not about target; vision is about a compelling destination that both internally and externally you feel energized" Harish Manwani, COO Hindustan Unilever Limited".

5.5. Managing off premises catering business:

To get success in off premises catering business you have to follow certain guidelines and must be able to make timely ethical decisions, lead with staff and clients, must be customer focused and hands on.

Following guidelines will help you to become a successful off premises caterer/ administrator:

Develop a strategic plan According to Yogi Berra, "*if you don't know where you're going, you will windup somewhere else*". That's the reason you need a strategic plan- a roadmap to help you determine the direction in which you wish to go and the specific goals you will need to accomplish to get there.

Prepare Strategic plan (Start with core values)

- Client and staff satisfaction
 - Ethical business practices
 - Training and motivation
 - Community services
 - Environmentally conscious business

Develop Mission Statement

For example: to meet the catering needs of the corporate community, providing high levels of service and food quality that result in repeat business and vital growth

Developing vision statement

For example: within three years, our company will be top ranked off premises catering firms in our area (Northern India) with continuing sales and profit growth, while giving back to our community.

Establish goals for operations

Goals must be **SMART** (*Specific, Measurable, Attainable, Relevant and Time-bound*) For example: A SMART goal might be to increase sales and profit by 20% each year for the next five years.

Revaluate

mission, vision and goals periodically because of times and trends changes for example if there is growth in off premises catering sector is 50% then what you will do with 20% growth. So next year goals must be revised to a 50%.

SMART :

- Goals must be specific, and easy to understood, concise and unambiguous.
- Measurable means quantity, cost, quality and time.
- Attainable goals motivate you and your team and if it's practically impossible, it may be frustrating.
- Goals must be relevant and fit well with your mission and vision.
- There must be a specific deadline to accomplish each goal.

• Always goals are not for the owner of the company and everybody in the organization should be aware of the goals. Always involve or accept advice from outside consultants and colleagues. Always remember, *"You can't do every thing, any thing"*.

Eye for detail: In off premises catering business, the details are virtually endless and being a caterer you must be look into each and every minute detail of the operations because one thing forgotten, misheard or misplaced can ruin an event. You can't operate this business successfully ideally sitting in the office behind a desk and delegating the task. During the operations, you must be in the centre either for checking, rechecking the quality of foods or meeting with the host/ the guests. Always ensure feedback from guests, oversee the production and service staff to ensure they are performing the tasks as directed, and must be ready to roll up your sleeves for any situation to work yourself and should never be satisfied with the things they are and look for new ways to present food and make it more flavorful and more better and efficient ways to do things.

Care for customer: according to Mike Deluca, editor of Restaurant Hospitality magazine." if you strive only the highest quality product and strive to lease every customer, sales, profit and success will follow" the morale is very simple if you satisfy your customer while charging a fair price and controlling cost, profits will follow.

Prompt decision making: According to Connie Sitterly, Management consultant and author you should "Plan ahead so when problems crop up, you are prepared to act, not to react. Control circumstances, in stead of allowing them to control you. Take the initiative by anticipating and solving business problems". While taking decisions always remember:

- You can't please everybody.
- Always allow time for planning and decision making.....Pick a time when you are fresh and energetic.
- > Never delay in taking decisions, delay decision can cost you millions of rupees.
- > Considered feeling whenever peoples are involved.
- > Remember that there is only one acceptable solution to the problem.

Leadership: A leader is more like a thermostat than a thermometer. Thermostat set the standard temperature and thermometer simply records the temperature, it can't change anything. Leader takes a little more than their share of the blame and a little less than their share of credit.

Leader Vs Manager

Manager	Leader
Maintains	Develops
Administers	Innovates
Relies on system	Relies on people
Counts on controls	Counts on trust

Does things right	Does the right things
Works within the system	Works on the system
Manages things	Leads people

5.6. Tips to follow to be a successful off premises caterer:

- Dress professionally. Most of the catering administrator seems casual and avoid maintaining relation or contact with the guests in our country.
- Build relationships with clients and don't look them as accounts or projects.
- Be on time or bit early.
- > Be honest and don't overpromise if you can't deliver.
- > Treat clients and staff members with respect.
- Enjoy your work and respect your profession as an off premises caterer or administrator.
- Publilius Syrus a Roman Philosopher said," A good reputation is more valuable than money". This is as true today as it was in ancient times.
- Follow ethical practices in the business as well in the life. Number of times host leaves the decisions on caterer about the planning of menu for the function or you may get a phone call to supply 45 meals at their home according to your choice. Ethical violation also occur when caterer receive under the table cash from other suppliers.
- > Be innovative and keep up date with the latest trends.
- ▶ Keep separate from competitors and make your own route of your success.
- Reexamine your business strategies, products and service standards on time to time.
- Develop your own USPs.
- Stress comes from interaction with others and from having to meet deadlines. Always remember a certain amount of stress and tension is necessary to achieve the best results. But too much stress can cause chronic fatigue, inflexibility and difficulty in thinking clearly and unable to perform at maximum capability.
- Physical exercises, meditation, yoga and reading articles are best way to reduce stress. Remember that some stress is good in catering. An arrow would not be propelled from a bow if the bow was not stressed. However, too much stress can break the bow as well as ruin the event.
- Make detailed list of daily goals and objectives.
- ▶ Use latest technology as much as possible.

- Always focus on results by asking yourself, "Will this activity help me to achieve any of my goals".
- ➢ Focus on one project at one time.
- > Maintain a log book and write the things to do for the day.
- Change in inevitable in this catering business so admire and try to change yourself also according to need of time, trends, requirement of the host.
- > Love to have fun in profession and must be adventurous.
- Take calculative risks whether it is trying new menu items, new buffet display concepts or job in a new and challenging off premise location.
- Always remember, nobody cares how much you know until they know how much you care. Empathy and genuine concern for your clients and staff paramount to long term success.
- > Plan ahead and quality before quantity.
- > Make habit to continually look for the little things.

"The quality of a person's life is in direct proportion to their commitment to excellence, regardless of their chosen field of endeavor".

Vince

Lombard

5.7. Logistic management in off premises catering

Logistic management deals with planning and execution of the off premises catered event and involves:

- Site selection
- Party packing list
- Packing and loading
- Delivering and unloading
- Execution of the party
- Reloading, returning and reviewing of the event

5.8. Site selection or Function Catering Premises

The following points should be considered before deciding the function catering area:

- Are the premises suitable?
- Is there adequate area for the type of Function to be organized?

- Is there enough room for reception and general circulation?
- Are the cloak rooms, powder rooms and toilets adequate?
- Is there any space for storing additional cutlery, crockery and glassware?
- Is the bar space adequate for the number of people the banqueting area can hold?
- Is the location of banquet area suitable from location point of view?

Tent Kitchen Layout for Off Premises Catering



Fig: Tent Kitchen Layout for Off Premises Catering

Excess to Dining Tent

Legends:

Æ

, () and A and B are garbage can

5.9. Pointers for off premises kitchen layout:

• Ensure food servers can easily pick up food and return soiled dishes without going through the kitchen.

Trees

- Remember safety procedure to keep everyone who is not the part of the kitchen staff out of the cooking area.
- Bussing area for dirty dishes should have sufficient garbage cans, water for rinsing and space for empty dish and glass crates.
- Use large banquet tables of 6' x 3' or 8' x 3' as kitchen work table.
- Coffee and dessert should always keep rear to the tent until ready to be served and must have sufficient space for coffee and dessert service.
- Arrangement should be made for warm plates for hot food courses.
- Ensure details of the schedule of the event and menu near to the food pickup area.

These are guidelines and experience is one of the best teachers in determining the space and ways to layout of an off premises catering event.

5.10. Setting of Beverage stations (BARS):

One of the most common feature of off premises catering is portable beverage station and most of the time skirted banquet tables are use beverage service as they provide more working space, plenty of storage space for back up supplies and give an eye appeal.

4		
Guests	Front Bar	Guests



5.11. Sample Checklist of equipment and supplies for beverage station set up

Equipment / s	supplies
~	2 Rectangle tables of 6 x 3 feet
~	One Frill (Skirt) of 14 foot for front bar leave a four feet opening at rear of bar for easy access
\succ	One Frill (Skirt) of 18 foot for back bar
\checkmark	Two Banquet cloths of 96 inches with the same color scheme of the event
\succ	2 packet Clips : To attach skirts to the tables
4	24 pieces of Glass bowls: For placing cut fruits and garnishes such as cherry, olives, onions
~	Stir straws
~	Sword picks For onions and olives
~	Ice chest For chilled beverages such as beers, wines, sodas, waters and champagne
~	Ice chest : Filed with crushed ice for drinks
~	Plastic Ice Scoop
\checkmark	Wine Openers
\checkmark	Bottle Openers
\checkmark	Bus Boxes For Trash And Dirty Glasses
\checkmark	Matches
~	Cocktail Trays
\checkmark	Plastic Glasses
\checkmark	Assorted Wine Glasses
\checkmark	Plastic Pourers For Liquor
\checkmark	Ice Pick
\checkmark	Bar Towels
\checkmark	Empty Plastic Crates: To Elevate Ice Chest
\checkmark	Small Table Cloth: To Wrap Around Plastic Crates
\checkmark	Bottles Of Liquors, Wine And Beers
>	After Dinner Drink: Kahlua, Cointreau,
\checkmark	Soft Drinks
4	Juices Cola
~	Cincer Ale

➢ Ginger Ale

- Club Soda
- Tonic, Sparkling Water
- ➤ Water
- ➢ Lemon Twists
- ➢ Lime Wedges
- Cocktail Olives
- Cocktail Onions
- > Decanters
- > Paper Napkins
- Disposables Umbrellas

5.12. Rental Equipment Order Form:

These forms can be copied or modified from the suppliers rental form with whom caterer do business.

HM Caterer	ſS								
Rental Equi	pment ord	er form							
Name Of Cli	ent:								
Delivery Add	dress:								
Delivery Dat	e:				Time To	Deliver:			
Date To Pick	с Up:				Order Pla	ced With (Name):		
Equipment	Qty required	Qty received	Qty returned	Price	Equipment	Qty required	Qty received	Qty returned	Pric e
Table rectangle 6'x3'					Water jar				
Table round 3'					Salad display plate				
Table round5'					Hot plate dispenser				
Half round table					Bread baskets				
Chairs					Sizzler plate				
Conference chairs					Soup tureens				
Bridal chairs					Fiber full plate				
Side boards					Juice extractor				
Salad mirrors					Kawa tawa				
Bar counter table					Vegetable tawa				

Podium			Dosa plate		

Subtotal of order

Extra fee for night pickup:

Above Ground delivery fee:

Credit due for the damaged or missing or other problems:

Balance due rental company:

5.13. Guide table for computing Food quantities

Item	Portion per person
Assorted starters	6-8 pieces before dinner
	8-10 pieces if served with food stations
	12-16 pieces with cocktails
	20-24 pieces if al evening with no dinner
Tea/ Coffee	120/150 ml
Assorted cold drinks	240-300 ml
Fresh fruit juices	120-150 ml
Soup	150-180 ml
Salads	30-50 gm
Meat	120-180 gm
Starch vegetables	60-90 gm
Green vegetables	60-90 gm
Rice / pulao	90-150 gm
Dal	60-90 gm
Curd preparation	60-90 gm
Papad	2 pieces
Desserts	Varies: richer the dessert- smaller the portion

5.13.1. Guide Tables for % overage

Number of guests guaranteed	% overage	Order food for	
50	20	60	
100	15	115	
200	10	220	
300	7.5	325	
400	5	420	

5.13.2. Guide Tables for cocktail party

Length of party	Number of drinks
One hour	2
Two hour	3
Three hour	3-4
Four hour	4-5

5.13.3. Guide table for liquor, wine, beer and mixer quantities

Liquor-liters	50 guests			Liquor-liters	100 guests				
	1 hr	2 hr	3 hr	4 hr		1 hr	2 hr	3 hr	4 hr
Scotch	2	3	3	4	Scotch	4	5	5	6
Vodka	2	3	3	4	Vodka	4	5	5	6
Gin	1	2	2	2	Gin	2	3	3	3
Rum	1	2	2	2	Rum	2	3	3	3
Canned Beer case (12 cans)	3	4	5	6	Canned Beer case (12 cans)	6	8	10	12
Light canned beer	1	2	2.5	3	Light canned beer	2	4	5	6
White wine	2	3	4	5	White wine	3	4	5	6
Red wine	2	3	4	5	Red wine	3	4	5	6

Soft drinks	10	12	15	18	Soft drink	15	20	24	30
Diet cola	2	3	4	5	Diet cola	4	5	6	7
Club soda	5	7	9	10	Club soda	12	16	20	24
Tonic water	2	3	3	4	Tonic water	4	5	6	7
Sparkling water	3	4	5	6	Sparkling water	5	6	7	8
Fresh fruit juice	2	3	4	5	Fresh fruit juice	4	5	6	7

Note: 750 ml bottle of liquor gives 25 drinks of 30 ml, 750 ml of wine bottle give 5 glasses of wine of 150 ml, I liter of soft drink provide 5 glasses, 650 ml of beer bottle give 2 glasses of beer of approximate 325 ml. 400 gm of ice require per person per hour. Whisky and beer are most popular drinks in cocktail party of middle age while tequila, vodka is most favorites in cocktail party of young generation. Lemon twists- one lemon for fifty guests, 5 onion sewer and 5 olive skewers for each fifty guests are adequate. One bottle of dry vermouth and one bottle of sweet vermouth is sufficient for any event of cocktail party.

5.14. Packing List

The most important primary step in off-premise catering is the preparation of a proper of a packing list. An itemized packing list should be prepared for each off-premise job. This list then serves as a guide for assembling items to be used or packed for the upcoming event.

A packing list is much more essential to an off-premise caterer than to an on-premise operator, whose equipment is always on hand. Setting up for a party some distance from the commissary and discovering that some essential equipment was short-packed, or omitted entirely, could cause considerable confusion, embarrassment and even trauma if time does not allow sending to the commissary for the needed items. Purchasing substitutes could be impossible if stores are closed or substitutes are unsuitable. Making out the list requires a concentrated and methodical approach. Carelessness can be expensive and, therefore, must be eliminated. An effective system in making out the list is to study each course on the menu and decide exactly what and how much service equipment it requires. Examine each line of the menu in succession and, on a blank sheet of paper, make the appropriate heading (the equipment required) and list the amounts needed for that service. Skipping around or using preprinted forms leads to unnecessary detail and confusion. Enter the needed amounts under the appropriate headings and if a subsequent course uses a dish or piece of equipment previously listed simply add to the number needed. Continue this process until the menu has been completed and then recheck for accuracy total the amounts under each heading and transfer the numbers to the packing sheet. The scheduler must have knowledge of the number of items in each unit, box, rack, cabinet etcetera. Full racks allow

for safer transport and easier tallying when packing for the return trip. There should also be an allowance made for extra guests, breakage at the point of service or rejection because of damage.Finally, check every item on the packing list that will be needed for ancillary services water pitchers, coffee pitchers, creamers, candelabra (for head table), cloths, napkins, work tools, ice buckets, baskets, etcetera.If dishwashing facilities are available, we probably will not need to pack as much equipment. As an example, if we are serving a party of 150, we will probably need highball glasses, which are normally packed 6 by 6, or 36 glasses to a rack. Where washing facilities are available, we could safely pack five (5) racks of glasses, a total of 180 glasses, knowing that we can keep glasses clean as needed. When dirty glasses are returned, accumulate them until we have enough for one rack, at which time they can be washed and returned to the bar. Bay the time they are ready to be used again, they will be clean and cool enough so that beverages can be poured into them. Without, dishwashing facilities, we would have to pack at least 10 racks of glasses, which would take up more truck space and require additional packing time.

This came principle applies to other items. For example, the underline used in the starter course can be used again, after washing, for the dessert course. The packing list also serves as a record of where equipment was previously used. It pinpoints time and place and, if a particular piece of equipment is missing, can make the task of getting it back much easier. Make notations on each packing list as to its accuracy, missing items, condition of equipment, and all other pertinent comments. Do not destroy the packing list but keep it with other permanent records of that particular affair.

Display fruit	
Display vegetables	
Cheese	
Vegetables	
Milk & its products	
Breads	
Herbs and spices	
Pantry items	
Linens	
Pots and pans	
Chinaware	
Glassware	
Flatware	

Sample Party packing list

Tableware	
Serving utensils and accessories	
Plastic ware and paper goods	
Buffet and food stations décor	
Heavy and bulky equipment	
Kitchen utensils	

Food production sheet gives an idea to the commissary personnel with a list of things to prepare for each party. These list details all menus items and time they need to be ready. It may include budgeted cost as well as total food cost for the event for the culinary staff with better insight.

<u>*Tips to follow:*</u> it has been observed that in most of the off premises catering party items are arranged from different locations and carts, dollies, handcarts are used to move the items to the vehicle or a central assembly location prior to loading. Following points are needed to consider:

- > Ensure listing of all the items on the pull sheet.
- Small items should be assembled in a specified area and packed in containers.
- Fragile items should be wrapped in bubble wrap, linens or wadded up paper to prevent breakage.
- > Place paper between two bowls to avoid breakage and should not stick together.
- > Ensure all equipments are working conditions and not broken.
- Use old briefcases to carry cutlery.
- ▶ Use plastic crates to carry chinaware.
- > Plywood boxes are ideal to carry coffee machines, chafing dishes.
- Empty ice chest is used to carry small unbreakable equipment.
- ▶ Use assorted sizes of Tupperware to carry cold food items.
- ▶ Hot food items are best shipped in insulated plastic containers or insulated thermal bags.

5.15. Pointers for loading and delivery the vehicle:

Catering vehicles should always be free from dents and scrapes and immaculately clean and waxed. Delivery truck is a marketing tool and carries the image of caterer. Driver of the truck represent companies image and should be immaculately attired, uniformed, well groomed and courteous. Follow a preventive maintenance program for the vehicle to avoid potential problems which may occur. Driver must have petty cash, a road map, written directions, highway emergency kit, umbrella, beeper and mobile phone. All paper work, insurance, driving license, registration and permits should along with the driver before proceed to the event destination. Important pointers are given to follow while loading the catering vehicle:

- > Do not assume any thing and loading process should not take lightly.
- > Use old rugs, towels, cardboard to make surface non slippery to carry items.
- > Everything should be packed together tightly.
- > Crates and racks should be nested together to avoid shifting in transit.
- Large, heavy (square or rectangle shaped) items such as ice chest, glass and china racks, square or rectangle plastic or plywood containers should be loaded first and kept in bottom.
- Light weight and unusually shaped items should be loaded last and inserted between wherever you find gap to help keep the load from shifting in transit.
- Follow the local health rules to carry cold food and may require carrying in refrigerated truck.
- Hot food should be kept at safe temperature above 140 degrees Fahrenheit in insulated carrying containers/ thermal bags or hot food holding cabinets.
- > Use hooks, eyelets and bungee cords to secure when the truck is not full.

The delivery process means moving the food, supplies and catering equipment from commissary to catering site. Plan ahead so delivery truck can reach on the site on time and allow twice the amount of time necessary for example if truck takes 30 minutes to reach a destination in normal situation then sent it one hour in advance. Always consider weather reports, check road conditions and traffic pattern. In India, we find heavy traffic during office hours on road that is 8-11 am and 5-7 pm so workout to avoid such situation.

5.15.1. *Unloading at the party site:* The main procedure to follow when unloading is to separate items depending upon where they will be used.

Tips to follow:

- Provide a diagram with an itemized set list of the setup to the people responsible for set up.
- Ensure unloading team with few staff. It has been observed that most of the caterers sent the entire crew for unloading (remember too many cooks spoil the broth).
- > Ensure hand trucks, trolley as these items save time and energy both.
- Don't force the men to carry more than 25 Kgm of weight and women can't carry more than 20 Kgm.
- > Move materials along the shortest and straightest route possible.

5.15.2. *Reloading and returning:* when the party is in progress, process of cleaning and repacking must be start and once cleaning and repacking is over, reloading can start. It is best to wait to reload the vehicle until most things are packed and ready to reload. A well loaded vehicle reduces the chances for spills and breakage on the return trip.

Event file routing schedule

Activities		By	Date
Sales & Front	Office		
\blacktriangleright	Verbal quote only		
\checkmark	Written proposal faxed and mailed		
\checkmark	Event file		
\checkmark	File label & folder		
\blacktriangleright	Return to sales (tentative status)		
\blacktriangleright	Acceptance sheet receipt from client		
\blacktriangleright	Post to board (definite status) and master book		
\blacktriangleright	Deposit receipt from client		
Coordinating			
\blacktriangleright	Event report initiated		
\blacktriangleright	Pre schedule staff		
\blacktriangleright	Send event file to purchasing		
Purchasing			
\checkmark	Event sheet to: chef/ kitchen production/ inventory control		
\blacktriangleright	Beverage order		
\checkmark	Linen order		
\blacktriangleright	Floral order		
\blacktriangleright	Décor order		
\blacktriangleright	Equipment order		
\blacktriangleright	Site rental agreement		
\blacktriangleright	Ice delivery		
\blacktriangleright	Entertainment order		
\triangleright	Service ware order		
\blacktriangleright	Special		
\checkmark	All check requests issued		
Coordinating			
\blacktriangleright	Complete event report		
\blacktriangleright	Load sheet		

\checkmark	Attach map to location			
\blacktriangleright	Make copies for event file			
\blacktriangleright	Reconfirm staff			
\triangleright	Buffet design completed			
\triangleright	Final guest count			
File compilati	on		+	
\blacktriangleright	Client contacted for vehicle review			
\blacktriangleright	Invoice: copies to Acct./Event File/ Invoice File			
\blacktriangleright	Verbal review forwarded to General Manager			
\blacktriangleright	Critique letter			
\blacktriangleright	Thank you card			
\blacktriangleright	Lost business report forwarded to General Manager			
\triangleright	Add to mail list			
Fig: The	Perfect Route- routing schedule adapted from Ginger Kra	mer.	and	the

<u>Fig:</u> The Perfect Route- routing schedule adapted from Ginger Kramer, and the CommuniCATER, official publication of National Caterers Association.

5.16. Execution of a wedding event

Weddings: Wedding functions are usually of two main types:

- Wedding breakfast
- Wedding reception (buffet)

<u>Wedding Reception (Buffet)</u> The buffet itself should be placed in such a position that it is on view to all guests as they enter the room, but within easy access of the service doors for ease of clearing and re-stocking. The buffet should be clothed up correctly in that the buffet cloth should reach within 1.3cm (1/2in) of the floor and both ends should be boxed nearly. The creases along the top and front of the buffet should all be lined up. Adequate room should be left between the buffet and wall to allow tow people to pass and for any extra supplies and equipment required. If the function is being carried out in a marquee in private grounds then the ground should be covered with canvas or a form of corded matting. Behind the buffet and in the service areas duck-boards may be used on canvas to avoid walking on wet ground or in mud and carrying it into the main part of the marquee.

Procedure at a Wedding Buffet Reception

Any casual staff required should report approximately one hour beforehand to complete the necessary mise-en-place, to be allocated duties and to be briefed on the procedure to be carried out.

- If a toastmaster is to be on duty, he should arrive approximately 30 minutes before the arrival of the bride and bridegroom to acquaint himself with the room where the function is being held and to enquire what his duties will be with regard to the announcing of guests on arrival. He must liaise with the best man to be a social evening afterwards then the toastmaster may act as MC for the duration of the function.
- > The bride and bridegroom should arrive first form the church. Some photographs may be taken at this stage and an aperitif offered or a glass of champagne.
- Immediately following the bride and bridegroom should be the parent of the bride and bridegroom and bridesmaids and/ or pages. These people will generally make up the 'receiving line' to greet the guests as the toastmaster announces them.
- All the guests should generally arrive together. Cloakrooms at this stage must be fully staffed. Guests announced by the toastmaster then pass down the receiving line and enter the room.
- The toastmaster should 'count' guests entering the room. This a help to management for costing purpose.
- The wine waiters should be placed at strategic points in the reception area for the service of aperitifs or champagne to the guests as they move on from the 'receiving line'. These trays should be replenished with full, fresh glasses. No bottles are handled. The wine waiters at the initial briefing should be allocated different sections of the room for service after the reception so as to ensure efficient service for all guests in the room.
- After the reception the buffet should be open for service. The turnover on the buffet should be quick and efficient so as to avoid any major delays which may cause congestion. The wine waiter at this stage should be going round serving drinks and topping up glasses. An important factor to note during the service of the food and drink is to ensure that there are always some members of staff circulating, keeping the table clear of any dirty equipment. Ashtrays should be changed as and when necessary.
- At the agreed time the toastmaster should announce the cutting of the cake by the bride and bridegroom. Portions of the cake should then be passed around to all guests and champagne taken round by the wine waiters. When this has been done the toasts should commence, being announced by the toastmaster, who should have all the principal people concerned in a group by the wedding cake, or in a central position so they can be seen and heard by everyone present.
- After the toasts any remaining cake and tiers must be packed ready to be taken away by the host. The top tier is sometimes kept for a christening. The bride and bridegroom should then change. If required, food and champagne should be placed in the changing rooms. Here liaison is demanded between floor service house-keeping and banqueting staff to ensure that timing is correct as far as the movements of the bride and bridegroom are concerned.
- When the bride and bridegroom have left the reception the flowers should be packed up for the host to take away.

Post – **Party Review:** one of the important tool to assess own performance and will give you an opportunity to cater the exact same event again. Always sit with the staff after the event and ask for their feedback, suggestions and recommendations in writing to improvement (the largest room in the

world is the room for improvement) and point of discussion should include: quality and quantity of food, service, equipment, supplies and staff, amount of time allotted for set up, adequacy of music, flower, décor, parking, security. Always provide a positive environment so the employees can discuss their problems.

Also look into the matter of discrepancies, accounting and bookkeeping and write a thank you letter to the client and establish follow –up date for contacting client for future event.

5.17. Transport sector:

Transport is an inseparable component of tourism and service industry and contribute major share in catering business of the country.

Indian Transport Network

- Approximate 41.41 lacs of domestic tourists use air as a mode of transport and significant growth has seen in last decade and air line registering a growth of 22.7% per annum and expecting that there will be requirement of 500 airports by the end of year 2020.
- Rail network covers a total length of 63,140 km with 8520 trains and carried approximate 8 billion passengers in 2010. For promoting tourism, special tourist circuits has been explored and provides special tourist trains such as Palace on Wheels, The Royal Rajasthan on Wheels, The Royale Orient, The Fairy Queen are running between important tourist's destinations. Passengers are given royal treatment in these trains. All the Rajdhani, Shatabdi, Swarn Shatabdi trains are air conditioned and breakfast, lunch, snacks, high tea, dinner, tea and mineral water are provided on board by highly trained, skilled and cheerful staff. Music is played through public sound system.
- India has a second largest network in the world with 3.3 million kilometers of road network. National highways have a total length of 65,569 Km, in addition 5,900 Kms long Golden Quadrilateral four lane National Highways have connected all four metro cities Delhi, Mumbai, Kolkata and Chennai. Government of India is spending approximate Rs. 2,20,000 crores in its ambitious The North South and East West Corridor.
- Water transport network comprises of rivers, canals, backwaters, and creeks. Indian coastal line is of approximate 7,517 km covering the main Lakshadweep Islands, and Andaman & Nicobar Island. The water transport has a merger share of 0.15% as compared to other countries in the world. Water transport is restricted in very few of the states of the country such as Goa, West Bengal, Kerala and offer motorized boats with entertainment and dining facilities in river cruises.

All these above facts give us clear visions about the development catering activities and types of catering business. The facilities, services & menu are totally differ from commercial sector & are based upon the duration of journey & class of passengers. Mostly airlines use the tray/ trolley for meal service for shorter duration of flight time while for longer duration it is full elaborate silver service. In trains there may be a separate dining room or meal service to the customer at their places by using meal trays. On ships, we find dining rooms as like commercial hotel & there are various theme dinners / parties are organized to the passengers. The motorways are entirely differ from the commercial sector, basically these are the well equipped motor vehicle which are generally found on an ideal location of a town or street & provides mini meals to the transit passengers at very moderate rates & enjoy their profits through fast turn over & volume of

business. There is always a need of base kitchen for a motorway-catering outlet & from their load semi- finished food & beverage items in their mobile & final preparation took place on the spot and as per the order of the guest. There is a need to maintain hygienic standard & quality of food material to get success in this business.

Air Line	Railway	Ship	Surface
Catering to air passengers on board/ in the air craft.	Catering to railway passengers both during the journey as well as halts at different stations.	Catering to cargo crew and passengers and ships has restaurants and kitchen on board.	Catering to passengers travelling by surface transport such as buses and private vehicles.
Modern airports have a variety of food and beverage outlets.	Constant supply of a variety of refreshment choices helps to make journey comfortable.	Quality of service and facilities offered depends on the class of ship and the price the passengers are willing to pay.	Eating establishments are located around bus terminals or on highways. Dhabas are most prominent type of catering establishment and provide fresh food round o clock at very moderate price in India.
Catering to passengers en route is normally contracted out to a flight catering unit of a reputed hotel or catering contractor or to the catering unit operated by airline itself as in independent entity.	On board meal services on long distance trains.	Ranges of service from room service, cocktail bars and specialty dining restaurants.	Most of the catering units are operated privately.

Features of Transport Catering

Air Catering Services at a Glance

Pointers For Meal Service	Frequency of meal services
Time of The Flight Operates	Flight under 45 minutes: No service but on early morning flights: rolls and coffee or snacks packs and generally provided at boarding gate and passenger can take them on board to eat

	in flight and if flight is less than 30 minutes: No service is provided.
Duration of Flight	Flight lasting 45 minutes to 90 minutes: meals are provided as per flight schedule in a tray.
Appropriate Time To Eat A Meal/ Snack	Flight lasting 90 minutes to 180 minutes: hot meal service and for business class or first class passengers: course meal services are offered and it is usually a tray service and cocktails are offered in international flights before the meal.
Competition	Flight lasting 180 minutes to 300 minutes (3-5 Hrs) will have most elaborate service. Meals may have appetizers, entrée, salads, desserts, fruits, cheese and liqueurs.
Air Line Budget	Flight more than 330 minutes will have more than one service.
Type of Customer Is It a Charter Flight	<i>Note:</i> All above meals are suggestive guidelines and service of the meal mentioned above is sole discretion of the airlines. Now day's domestic airlines are not offering meals to their passengers but have the provision to sale in flight as per the menu (a la carte).

Bond Storage and Custom Procedures

Bonded items refer to items that are free of tax and that are for export use only. These bonded items are under the control of customs official and airline and or contractor /caterer. Needless to say, it is important to maintain tight security to prevent these items from becoming mixed with regular goods. Bonded items are categorized as:

For the use of passengers: Liquor, Tobacco products, Perfumes/ Colognes, Lighters and other goods that may sell in the airplanes.

Air line supplies: Napkins and other paper goods, meal equipments (trays/ cups/ glasses and casseroles), dry stores items, juices, mineral water, chocolates and other food stuffs.

The caterer is required to provide separate storage areas for each carrier (airlines) within the kitchen. Area must be of a secure nature so that one can't gain access without authority. Doors must have double locks. Custom officials control one lock and the airline the other. Thus, the bonded area can't be opened without both representatives present.

Control procedures:

- A complete inventory
- Requisition is made

• Items used by caterer taken directly to the kitchen

<u>Chennai's Hijackk – A New Dining Experience</u>

Moistclay Entertainment and Media Private Limited with its Franchise partner, The Moving Cart has launched a Double Decker Mobile Restaurant in the Metropolis. The multi cuisine restaurant, "*Hijackk*", has an open to sky upper deck has live music, sovoury cuisine and open space for dining and a fully air-conditioned lower deck with a capacity of 44 covers. Menu comprises of 7 courses with a price of INR 565 for vegetarian and INR 765 for non vegetarian.

Source : adapted from imagefood.com

Indian Airlines offers a wide variety in its in-flight meal menus, with a multi-cuisine approach to cater to the predilections of the range of passengers on its network stretching across the Indian sub-continent and into the Middle-East and South-East Asia. Reputed hotel chains, like the Taj Group and Ambassador, provide most of our flight catering. Cabin services are continuously under review with innovations and improvements as our aim. Apart from normal Vegetarian and Non-Vegetarian Meals, Indian Airlines also provides Special Meals such as Jain Meal, Diet Meal, Child Meal etc

5.18. Recreation and Leisure:

There is a significant growth has been observe in last decade in our country due to introduction of malls culture, sports, stadiums, movie theaters, bowling alleys, amusement, water parks, conventional centers through out the country. You can find at least one PVR in all the malls which have almost three screens and have capacity of 1500 to 2000 seats and promote catering services to the viewers and one food court in every mall comprises of ten to twelve food and beverage outlets with a common dining place and caters 3500- 5000 meals a day. Outlets of the entertainment sector are more focused on entertainment in comparison to provision of food & beverages facilities and provide food at moderate rate and range of food items from typical Indian samosas, finger chips to specialties of the catering house in IPL. The examples of these outlets are nightclub, discotheque, theme parks, Water Park, fun & food park, casinos etc.

5.19. Career Information:
Indian hotels are gaining popularity day by its hospitality and country has become a destination of MICE means meetings, incentive tours, conferences and events tourism in last couple of years and food and beverage service is not restricted to the food and beverage operational areas but also has been reached to the home of the diners through social of premises caterers. You can reach up to top by gaining expertise in the filed of food and beverage service. You can manage your outlet as well as off premises catering unit simultaneously double the net profit. As the job requires lot of physical as well as mental efforts to perform and gain excellence in the service industry but performing in few events, you can develop yourself and the motivation comes from huge margin of profit earned after a successful event.

5.20. Summary

Operational as well as management aspects of function catering: banquet and off premises catering are dealt in detail in the chapter. Practical aspects associated with banquet and logistic management of off premises catering has been discussing with the help of suitable illustrations. Various formats and guide tables are given to under stand the topic in details. To make the chapter interesting and meaning full -Flow charts and layout diagrams are given according to need of the topic. Detail job descriptions and organization structure will help to set your own catering business

5.21. Case study

Case study one: Grand Hyatt, Mumbai a city landmark, built on 10 acres of prime land in the centre of Mumbai. This landmark, multi-dimensional lifestyle complex set in the heart of Mumbai's newly emerging Financial and Diamond district of Bandra-Kurla, only minutes from the Domestic and International airport terminals. With over a million square feet of development, this grand complex comprises of **547 guest rooms**, **147 fully serviced apartments**, Five restaurants an entertainment centre, a fully equipped health clus and spa . It has one of Mumbai's largest Ballroom and over 1, 00,000 Sq.ft. of space dedicated to a Shopping plaza. Following details are made available by the management of Hotel Grand Hyatt, Mumbai. Workout the capacity of the various banquets and conference facilities:

Function room	Area (sq. ft)	Theatre style	Class	U-	Board
name			Room	Shaped	
Grand Ball room	11861				
Grand Ball room (I)	3789				
Grand Ball room (II)	4273				
Grand Ball room	3789				

(III)			
Broad Room (I)	866		
Broad Room (II)	879		
Grand Salon	3255		
Grand Salon (I)	824		
Grand Salon (II)	1142		
Mahogany Room	1290		
Drawing Room	1299		

Case study two: A five star Hotel is planning to facilitate excellent Banqueting and Conference facilities. Hotel has a demand of 8 meeting rooms those can accommodate from 100 to 1000 persons. Hotel wants to start a state of the Art Business Centre with Conference rooms and private offices to be opened round the clock. As a consultant suggest the area in square feet of the following banquets and conference facilities:

Venue	Theatre	Class Room	U-Shaped	Sit Down	Cocktails	Area feet	in	square
Hall A	600	180	90	320	700			
Hall B	90	55	45	80	150			
Hall C	50	25	25	40	60			
Hall D	120	65	45	96	150			
Hall E	175	90	55	120	200			
Hall F	45	30	30	40	50			
Hall G	55	35	25	40	70			
Hall H	60	30	30	40	80			

5.22. Key words and concepts:

Behavior: the way a person conducts himself/ herself.

Board: a smooth surface used for writing or drawing on which chalk or a dry erase marker, a board is a type of classroom support media.

Case study: an alternative teaching method where participants analyze a problematic situation individually or in a group.

Chart: a single sheet of paper, cardboard or poster board is used to display images, concepts or processes, a type of classroom support media.

Demonstration: an individual performance of a task or a skill to show how something is done.

Evaluation: the act of judging the value of an object or concept.

Feedback: the information given by a client about how a person is performing.

Panel: a content presentation method where expert interacts directly with one another on specific issues.

5.23. Concept review questions

Qu. Define banquet and categorize the banquet functions.

Qu. Propose an organization structure of banquet department of a large hotel.

Qu. Write job descriptions of any two of the following:

- ➢ Banquet manager
- ➢ Banquet captain.
- ➢ Banquet secretary.

Qu. Illustrate banquet booking procedure with the help of a flow diagram.

Qu. Draw the format of any two of the following:

- Banquet Booking Diary
- Function Checklist
- Function Prospectus

Qu. Write short notes on any four of the following:

- Toast procedure
- Menu planning for function catering
- Wave Service
- Site selection for off remises catering
- A perfect route

Qu. Differentiate between any two of the following:

- ➢ Finger buffet and fork buffet
- Buffet configuration and banquet configuration
- ➢ Formal banquet and informal banquet

Qu. Prepare a write up on logistic management of off premises catering.

Qu. Propose area required menu, table configuration and equipment checklist for a state function to be catered for 150 guests on sprigs and 21 guests on head table.

5.24. Test Your Knowledge

State true or false:

- > Per cover area require in formal party requires more space than semi formal party.
- Banquet contract form is filled by sommelier.
- > The show means buffet.
- > In fork buffet, cutlery is placed on dining table.
- > Banquet contract form circulates to all departments of the hotel.

5.25. Suggested Reading

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- 10. Zobel, Myron (1962.) "Global cuisine: being the unique recipes of the 84 top restaurants of the world." Patron Press.
- 11. Cooking Ingredients Christine Ingram (Hermes House) Year 2007
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- 13. Food Production Operations Parvinder Bali (Oxford Publication) Year 2009
- 14. Larousse Gastronomique Hamlyn Publications Year 2009

Unit-6

Quantity Purchase & Storage

Structure of the Unit

6.1	Introduction
6.2	Principles of Effective Purchasing
6.3	Principles of Indenting for Volume Feeding
6.4	Purchasing Function
6.5	Purchasing Process
6.6	Purchase Systems & Specifications
6.7	Standard Purchase Specifications (SPS)
6.8	Purchasing Methods
6.9	Storage
6.10	Storage for bulk and Store Layout
6.11	Storekeeping
6.12	Food Quality in Storage
6.13	Summary
6.14	Review Questions
6.15	References and Suggestive Readings

6.1 Introduction

In food service operations, the importance of purchase and indenting is prominent and is given due importance. The banqueting department in a hotel or where volume food is involved makes more profit and revenue as compared to a restaurant. The food cost for a restaurant might be around 25-30 % as compared to that for a banqueting operation, which might operate at a food cost of 12-15 % depending on the type of function.

In hospitals, schools, employee restaurants, and similar operations, food cost is entirely different as compared to the hotels. This is because; they have different pricing options according to the people they cater to.

The basic concept of a food operation is to turn a raw food into an edible product by applying heat on it. The success of any food service operation is dependent on how the raw materials are procured, processed, cooked, and then served to the customer to generate profit with maximization.

The most important thing in food operations is to purchase commodities at the best possible rates in order to increase profit margin. When catering in volumes or in bulk, small savings on commodity purchase can amount to large savings of money because of the quantities involved. Not only, the battle is won by proper purchase control but by proper receiving, storage, processing, cooking and serving. Each step mentioned should be properly controlled and monitored. Serving of food plays a very important role in portion control and hence it has to be controlled as well.

The purchasing process gets initiated only when a need is recognized after which a number of steps follow before an item can be actually bought. The purchasing process thus requires the interaction and co-ordination between staff of users departments, suppliers, stores, accounts and inventory managers, depending on the size of the establishment.

If the quantity is purchased properly then it would help us not letting be in a state where there is neither excess nor shortage of products during cooking operations. Only if, this section is controlled properly, it would be of great help in operation and undoubtedly in maximization of profit generation by the organization or hotel.

6.2 Principles of Effective Purchasing

The principles of effective purchasing are based on the commitment of the organizational funds to those items which are in highest demand for that amount of money, so as to lead the establishment to profitability and success.

In catering, food constitutes the major variable cost and therefore purchasing decisions must be carefully made in consultation with user departments, sales and service to ensure efficiency.

Following principles of purchasing have been enumerated as a guide to making decisions:

• Continuity of supply:

This is of critical importance for minimizing or eliminating disruption in food production activities.

• Minimum Investment in stocks:

This is particularly noteworthy since food is not only variable in its perishability, but requires a large variety of ingredients for its production into meals, snacks, desserts, beverages and so on. Costs of space which can be alternatively utilized for profitable activities, along with storage and handling costs amount to a sizeable blockage of capital. Therefore quantities to be stocked need to be considered very carefully while purchasing.

• Security of stocks:

Forward buying has to be carefully balanced with present usage requirements. Security refers not only to guarding of stocks from pilferage or theft but also preventing spoilage or deterioration of quality in storage. One is mostly tempted to order quantities that may bring cash discounts immediately, but in long run may find that a large percentage of the commodities have to be discarded because they are unfit to be served to the customer.

• Maintenance of Quality:

The objective of purchasing is to procure those goods which are most suited to production requirements for end use, rather than those which rank highest in absolute quality, in terms of standard quality marks, grades or brands. With perishable fresh foods like fruits, vegetables, meats, eggs, bread etc. the purchasing department should direct deliveries straight to the user department or kitchen for production of quality meals.

• Procurement at low cost:

In the matter of buying food materials the principle should be to purchase at the lowest ultimate cost rather than lowest initial cost. This does not mean getting cheap, nonstandard materials, but reflects the bringing down of procurement prices through negotiation or cutting on packaging costs while still maintaining quality standards. This is usually done through bulk package purchasing directly from manufacturers, and using single suppliers who are conscious of the quality and quantities that are required on a long term basis.

• Avoidance of Duplication and waste:

Interaction between purchasing production and user departments is important to achieve reduction of food waste and duplication of procurement, time and effect which can result from sudden menu changes or production policy shifts.

• Maintenance of Competitive position:

The one in-charge of purchasing must have a thorough knowledge of the market environment and the purchasing policies of those offering similar goods and service to their customers. This requires experience and a high degree of executive judgement, through which impending taste changes of customers can be gauged in advance.

A purchasing manage who can communicate these changes to production and service departments in advance can maintain the competitive position by drawing attention to costs, quality and prices that the market will take.

• Image with supplier:

What a supplier thinks of you and your organization can be an asset or liability in the procurement of foods and materials. It is therefore important to set up a value based image through high ethical standards that are then reflected in a supplier's response to the purchasing manager, staff and then organization as a whole. A supplier feels a sense of loyalty to the organization if he sees justice, honesty of dealing and not a sense of exploitation through corruption and bribery.

Besides this, the organization will experience less difficulty in procuring foods during periods of short supply or getting a price advantage during seasons of glut from loyal suppliers.

• Harmonious Environment:

Development of relationships that lead to harmony and cooperation both within the organization and outside it results in a sense of mutual trust and respect among all associates. Irrespective of which principles are used in the purchasing function of a catering establishment, the basic principle towards which everyone is working is the effective commitment of organizational funds and if the whole team works towards it together, the organization is bound to succeed.

6.3 Principles of indenting for Volume Feeding.

The basic fundamental in any of the food operation is to convert raw material into edible food products with or without application of heat. Many steps like procurement, processing, and cooking all have to be monitored along with purchasing of the raw material.

A list of raw material required for preparing a certain menu is required. In volume cooking, one has to look at the menu in entirety and prepare a detailed product list that needs to be prepared. In order to prepare this list, excel sheets are used on computers with the formulas fed into the total column. One has to enter the ingredients required for each dish and it gives you a master indent list for placing orders.

The main reason for preparing such a sheet is that it gives one a concise ingredient list and ensures that you have not missed out any ingredient that needs to be ordered. This also helps in controlling production. The approach to recipes for bulk cooking is slightly different to that for an a la carte kitchen.

Yield of a product:

The yield of a particular commodity has a huge impact on the indenting for volumes. All the recipes should be updated with the yields, as we need to indent for the net weight in a recipe and not only for the usable weight. The cheapest item might prove to be expensive if the end yield of the product is low. Some suppliers now even sell pre-portioned meat so that the buyer gets an advantage and there is consistency in the product quality and cost.

Type of event:

The type of event for which food is required also plays a key role in the indenting of the food. A gala event would have a huge range of menu catering to even more than 1000 people whereas in small conferences the number of pax is relatively very low. So, different menu has to be decided for both the event as they are entirely different in themselves. When the variety of the dish is more, the quantities of the dish consumed will be comparatively less as most of the guests would like to taste most of the varieties. But in case of a conference menu, where the menu is limited, a good judgement based on experience would determine the right quantity to be produced.

Regional influence:

Regional food also plays a crucial role in deciding the indenting for a particular item. The type of the dish also plays an important part in deciding the quantity to be produced. The people preferences also are an important part in this crucial factor. People of Bengal would love to consume fish, while people from north India would prefer chicken. Also, chicken in chicken kebab is consumed much as compared to chicken curry.

Service style:

One important factor deciding the indenting is undoubtedly the style of service, whether buffet or ala carte. The consumption of the food is entirely different in buffet style eating and in preportioned service.

Seasonal Availability:

The seasonal availability of the fresh vegetables or the vegetables found in abundance is also a deciding factor during indenting. Such vegetables or raw material are procured much for function like gala events or wedding functions.

6.4 Purchasing Functions

Purchasing functions and activities need to be planned according to the policies laid down for each establishment. The following functions applicable generally are enumerated.

- Keeping records of specifications for each type of dish on the menu developed with the help of those who prepare the meals.
- Storing foods in a manner that will enhance or maintain their keeping qualities.
- Using perishable foods within 2 days of purchase.
- Rotating use of packaged foods so that the older stocks are used first.
- Formulating specifications for food items.
- Liaising with suppliers and user departments.
- Placing orders.
- Receiving of food and supplies.
- Inspection of goods.
- Taking or rejecting delivery of goods.
- Storing or issuing directly to user departments against requisitions.
- Maintaining inventories.
- Maintaining safety and security of stores, by keeping an eagle eye.
- Disposing off obsolete equipment and waste materials.
- Control of stocks
- Staff management.

6.5 Purchasing Process

The purchasing process gets initiated only when a need is recognized, and is followed by a number of processes to complete the channel of entire purchasing. The purchasing process thus requires the interaction and coordination between staff of user departments, suppliers, stores, accounts and inventory managers, depending on the size of the organization.

6.6 Purchase Systems & Specifications

Purchasing is the formal process of buying goods and services. Purchasing refers to a business or organization attempting to acquiring goods or services to accomplish the goals of its enterprise. Though there are several organizations that attempt to set standards in the purchasing process, processes can vary greatly between organizations. Typically the word "purchasing" is not used interchangeably with the word "procurement", since procurement typically includes expediting, supplier quality, and traffic and logistics in addition to purchasing. The purchasing process can vary from one organization to another, but there are some common key elements.

The process usually starts with a demand or requirements – this could be for a physical part (inventory) or a service. A requisition is generated, which details the requirements (in some cases providing a requirements speciation) which actions the procurement department. A request for proposal (RFP) or request for quotation (RFQ) is then raised. Suppliers send their quotations in response to the RFQ, and a review is undertaken where the best offer (typically based on price, availability and quality) is given the purchase order.

Purchase orders (PO) can be of various types, including:

- Standard a onetime buy.
- Planned an agreement on a specific item at an approximate date.
- Blanket an agreement on specific terms and conditions: date and quantity and amount are not specified.

Purchase orders are normally accompanied by terms and conditions which form the contractual agreement of the transaction. The supplier then delivers the products or service and the customer records the delivery (in some cases this goes through a goods inspection process). An invoice is sent by the supplier which is cross-checked with the purchase order and documents specifying which goods have been received. The payment is then made and transferred to the supplier. Thus in short, the purchasing is done.

Materials need to be purchased against some standards and such standards are known as 'specifications'. These specifications are made on the basis of the end products and how it is perceived to be served. Skilful purchasing with good receiving and storage can play a major role in the bottom line of the organization of hotel. Following are the factors on which one has to lay great emphasis to be aware of the purchase function properly. The following factors are as below:

• Market Knowledge:

The commodity market is the most volatile market and hence the purchase manager should be well aware of the market. The commodity market also varies in both quality and pricing. It is desirable to purchase good quality product which cannot be ensured by only paying hefty amount. Therefore, it is important to develop and build up relationships with reputed suppliers. It is mandatory for the purchase manager to have a genuine knowledge about the commodity to be purchased and about its seasonal availability as well. Along with this, the purchase manager or purchase personnel must know about the legal aspects of purchasing. It is also equally important to know about the market with regards to the conditions of supply and demand, as these factors would cause implications on the price of the particular commodity. Market knowledge is gained by proper research and it includes gaining information on the suppliers available in the market, their reputation, and their scale of business. All these information are of great help in proper

and smooth functioning. Thus, market knowledge is the first and foremost step in knowing the functionality of the purchase section.

• Determine the kind of purchases:

The purchase department is the department concerned with the purchase of the entire hotel, not only with the purchase of the single department but here we are talking about the food and beverage department purchases. The commodities of the food and beverage are generally perishable in nature and hence it has to be dealt with extra care and precautions. As few ingredients are highly perishable, they can't be purchased in large quantity without keeping in mind the storage facility available for it. The goods that are not perishable in nature can be purchased in bulk as they have comparatively large shelf life and examples for such purchases includes canned, bottled, frozen and dehydrated food. Also bulk purchases of such items can be done at a good price from the supplier. The frequency of the purchase would also depend on the amount of storage space available in the premise.

• Specifications:

Once the menu has been finalized, the chefs carry out the yield tests to determine the specifications of a product. The specification of the product largely depends on the usage of the raw material, where it is to be used. For instance, the very ripe tomatoes can be used for preparing makhani gravy but can't be used in green salad like preparation. For green salad, we need hard but ripe tomatoes. Thus, the specification of the ripe tomatoes would differ in both the cases. Similarly, for a large volume operation it would be intelligent to buy large potatoes that are easy to peel and process for bulk cooking.

• Designing the process of buying:

The designing process of buying is an important and crucial step in the procedures of the purchasing. There are two ways of purchasing methods and they are formal and informal purchasing systems. The informal way of purchasing or buying may differ according to the market conditions and is done verbally either in person or over telephone through oral negotiations before ultimately purchasing the product. Mostly such transactions might involve cash purchases or some suppliers might give a credit period depending upon the relationship between the purchaser and the supplier. Formal buying is a very competitive method of buying, where the user provides the specifications to the supplier who in turn quotes the price of the product depending upon the specifications. Such buying involves negotiations and filling-up of tenders. The suppliers agree to supply the goods at the agreed rate even when there is a fluctuation in the rate.

• Receiving procedures:

This step again is very important and requires a sharp eye of detail and observation. It is necessary to check whether the goods received are as per their specifications. Otherwise,

the supplier may supply the substandard products and the organization will have to pay for the same. It is important for chefs to constantly check all the food products and reject any food that is not as per the specification. The supplier is given a time to procure the items as per the specifications, or else the hotel can buy the product from the open market and charge the same to the supplier. The goods are received as per the food safety laws, and the temperature and the condition of the packaging are given utmost importance. Catering establishments, such as airlines and hospitals, have very strict receiving quality standards to control quality and standardization. The next step after receiving goods is the proper storage of the food and its consumption in a right way.

These are the few steps involved in purchasing procedures of the raw material or ingredients by the hotel.

6.7 Standard Purchase Specification (SPS)

The entire system of purchasing is done on the basis of the menu planned. Research is carried out to find a market that can supply the products at the most competitive prices. Once the right market is identified, samples are procured from various suppliers and then tests such as those for quantity and quality are done to narrow these down in a document called Standard purchase specification. The format of SPS may differ from one organization to another. SPS helps in creating a standard quality of the product to be required by the organization.

Copies of the SPS need to be sent to the following:

- 1. The purchase department
- 2. The supplier
- 3. The Executive chef or the Head chef
- 4. The receiving department

Hotel XYZ			
Standard Purchase Specifications			
Name of product		_	
Intended Use		_	
Grade Quality		_	
Unit	Price	per	Unit
		_	
Availability:	month descri	bed or all yea	r round
Appearance			
Texture			

Colour	
Flavour	
Packing	
Size and Shape	
No. per Kg	
Any other remarks	
Signature of purchase Officer D	Date:

Format of Standard Purchase Specification

A purchase specification may be within in a standard form. It may contain:

- Definition of each item
- Grade or brand name of the items
- Weight, sixe or count
- Unit against which prices should be quoted
- Special note for the commodity

Preparation of a standard specification has following advantages:

- Establishing a buying standard of a commodity so that a standard product is available for the customer
- Inform the supplier in writing by drawing, or photograph or description precisely what is required
- Provides detailed information to receiving department and store as to the standard of foods to accept
- Makes staff, chef food and beverage manager, and other staff, aware of the differences that can occur in the size, weight and quantity etc. of the product
- The specification acts as an aide-memoire to all concerned of what was agreed.

Along with all these factors, there are many other factors on which the purchase of the hotel depends on and they are as such:

• Type of establishment:

It will largely monitor the purchasing systems and procedures. A free-standing restaurant serving only a few meals a day would handpick and select commodities and not necessarily by in bulk, whereas in hospital catering the establishment might go in for the commodities that are approved by dieticians and doctors. Every catering establishment has its own operating policies designed by the senior management and these rules are clearly mentioned.

• Storage Space available:

It is one such factor that has a huge impact on the style of the purchasing system and procedure. If the establishment has fully equipped dry and cold storage areas, then purchases can be made in bulk and stored to avail the best competitive prices. But if an operation does not involve storage, as in the case of airline catering, where the emphasis is on fresh produce, then the establishment would prefer to make daily purchases.

• Geographical location:

This factor also plays a key role in the purchasing system. This can be explained by the instance of resort property located away from the main city location finds problem of transportation of raw material in such places. A hotel situated in Shimla would depend on Delhi or Chandigarh for procuring some items from the kitchen. In winter season, when there is snow fall, the hotels need to alter their systems of purchase. They would need to stock items for such times. Also, if the commodity is not available locally it would have to be procured through either international markets or national markets, depending upon the necessity of the commodity.

• Use of convenience foods:

The use of convenience food is also a deciding factor in purchasing policy matter. If the use of convenience food is high in any organization then the use of fresh raw material may get down. For example, if the hotel uses tomato puree tin then the use of fresh tomato will automatically come down. Thus the storage facility is also designed according to this. Such organization always has a different way of indenting as compared to the one which deals only in fresh raw materials.

• Skills of the employees:

The skill set and experience of staff also plays a substantial role in the purchasing of goods. For example, an Indian restaurant abroad would have to buy canned sweets if there is no skilled craftsman to make them in-house or the resources do not allow the product to be made in-house. In such cases, making purchases of the canned commodity becomes a necessity.

6.8 Purchasing Methods

Mostly there are few methods of purchasing used in catering industry for food and materials.

They are:

Direct Delivery:

This is a method of involving direct delivery of food and drink from the manufacturer, who may be referred to as a national supplier.

Open Market Buying:

This is the most common buying method for food items in food service establishments. The buyer invites quotations from the suppliers for items according to the required specifications. The supplier id then selected on the basis of his samples, prices, delivery schedule and other service offered. Contact with suppliers is made by visits to markets, on telephone or by visits of sellers to the food service establishment. Open market buying is an informal method and can easily be adapted to individual establishments. It is generally used for purchasing of perishable foods like fruits, vegetables, meat etc. This also enables the caterer to pick up smaller quantities of items to suit stock holding level, so important for items used occasionally or less routinely.

• Cash and Carry Method:

This is the most suitable method for small and medium sized establishments. There is a complete freedom for purchasing from the market at competitive price and the buyer can personally check the quantity and taste of the item. However, the caterer has to pay cash for all items purchased and has to provide his own staff and transport to collect the items from the place of purchase.

• Paid Reserve Method:

This method is used when it is necessary to ensure the quantity of supply of an item for the menu which is of particular importance for a speciality restaurant, such as jumbo size prawns, frozen fillets of beef etc. To be on the safe, the caterer buys in advance a large quantity of these items to cover the needs for future months, and requisition his weekly requirements from the suppliers. The stocks are hold by the supplier.

Formal Buying:

In this method formal quotations are invited from sellers against written specifications for each category of foods. These requests for bids may be made through dailies, or printed material which is widely distributed or posted to interested sellers who may be contacted on phone. Along with specifications the buyers also include in their requests, conditions like date for quotations, general time between order and delivery, mode of delivery, terms of payment, willingness to accept whole or part of the bid, discounts, and so on framed within the purchasing policy of each establishment.

The quotations received remain sealed till the date of opening which is also indicated in the buyer's requests. They are the opened by the purchasing manager in the presence of the bidders and representatives from the user department, accounts and administrative staff, who witness the quotation accepted. The practice is to accept the quotations of the lowest bidder, unless products clearly fail to meet the specifications.

This method of buying is generally adopted by the government establishments for which central purchasing is done, such as for hospitals, or homes for the handicapped or government schools.

Negotiated Buying:

As the name indicates this involves negotiations between buyer and seller regarding prices and quantities. This method is generally used for seasonal items which are limited in supply, where both buyer and seller are keen that the product is lifted quickly.

Negotiating buying therefore involves taking quick decisions in a fluctuating market. The buyer contact sellers directly, negotiate the price and quantity and request bids are submitted as soon as possible.

Obviously, this method is quicker, more flexible and less formal than the competitive bid method.

Wholesale Buying:

In this method, a contract is signed with a wholesaler for purchase of goods at a specific price for a future period, along with the quantities required and when. The agreement specifies the intervals between deliveries for the contract period. This method is suitable for the larger organizations or central purchase departments.

The wholesaler can offer more frequent deliveries than the national supplier or manufacturer, but within a much more restricted area. Usually caterers tend to use a combination of manufacturer and wholesaler as the supply sources, depending on the requirements.

Blanket Order Purchasing:

A blanket order is an agreement to provide a specified quantity of listed items for a period of time at an agreed price. If the price is not settled at the time of placing the order, a method of determining it is included in the contract. Deliveries are then made under the specified release system.

Another type of blanket order agreement is to furnish all the needs for particular items for a specific period. Under this the quantity is not re-fixed until the time period has elapsed. This method of purchasing is best for items that are required in small quantities but more frequently and whose usage rate cannot be planned accurately.

A blanket order is contracted usually for one year, although variations may exist between establishments.

The description of orders in this method may be handled in any of three ways.

- Itemization of all possible products covered.
- Broad descriptions of goods such as crockery, cutlery, detergents etc.
- General orders to cover all items that a supplier can provide.

This method is useful because it eliminates the routine administrative work of ordering and carrying products in stock which are only a phone call away. Lower prices too can be negotiated because supplier keeps the stock often at earlier prices even though current prices may be higher in the market when the order is placed.

Contract Purchasing:

This is also called a systems contract and usually used by 5-star hotel chains. The technique assists the buyer and seller to improve reordering of materials which are repetitively used, with minimal administrative expenses, while still maintains control. This method is in many ways similar to the Blanket order technique except that the arrangement is a long term one and suppliers are therefore not changed frequently.

The supplier usually assists the buyer in analyzing requirements of materials covered by the contract so that the contract details will reflect the product variations and prices most suitable to him. The rate of usage and frequency of reordering is needed to be known over the past contract period.

The systems approach has a number of benefits such as:

- Deliveries are within a 24 hour work period.
- Time spent with the buyer is reduced.
- Lower prices.
- Space and staff costs reduced.
- Errors in ordering are reduced.
- Wastages due to changes in requirements are eliminated.

Small-order Methods:

Most establishments require purchases to be made which are non-recurring and involve small sums of money. The purchase methods used for these transactions involve the petty cash system, cash on delivery or telephonic ordering check payment system.

6.9 Storage

Storekeeping is one of the most neglected activities in small scale establishments. The first principle in storekeeping is to know what is where, when it is needed by the user department.

Most food materials need to be stored for different lengths of time and at different temperatures, to preserve their wholesomeness till required for preparation and service. For effective storage of food items therefore, two types of storages are used the dry storage rooms meant for non-perishables commodities like cereals and their products, pulses, legumes, sugar and spices, canned foods, fats and oils, etc. and the low temperature storages for semi-perishable and perishable foods.

Food stores in all establishments should be situated for easy access by staff of user departments as well as suppliers, without causing any interference in the flow of work of all concerned.

Dry storerooms should be well lighted so that every item placed in them is easily visible and identifiable. Good ventilation helps to prevent spoilage, and maintain the temperature required. It is also desired that the store room should have only one entrance-exit point by keeping in mind the security of the stores.

A lot of damage is done to quality when foods are not stored in a systematic manner. Hence, the store should be systematic in nature.

Organization of Storages:

The arrangement of food items spaces affects the efficiency with which foods can be stocked, issued and re-ordered. Any system adopted therefore, should aim at establishing a smooth flow of material in and out of the stores in a manner that will preserve the qualities of foods to the maximum. Haphazard arrangements lead to situations where fresh stocks may be issued before earlier ones are used up; or more orders for an item placed because none of it could be easily located on the shelves when required.

The following suggestions will prove helpful in creating a systematic arrangement of food items in storage.

- Arrange food according to the type of commodity.
- Place item in alphabetical order of food categories, following the same system within each category as well.
- Stamp the date of delivery on every stock received before shelving to ensure that old stocks are used up first.
- Place items on shelves according to date stamped, with earlier ones in the front of a row, and later ones at the back. Stamping also helps to cost the stocks more accurately according to the prices paid on the bill for the particular lot.
- Arrange products to give an organized appearance. Efforts should be made to ensure that commodities do not lie around on the floor at any time.

6.10 Storage for Bulk and Store Layout

Storage areas are places that are designed and meant to store the raw or cooked food before or after the cooking and service operations. Storage of food items is a very crucial step in any catering establishment as it is related to wastage and pilferage of the raw material and hence connected to the profitability of the organization. So it is important to ensure that food items purchased with care and research are stored properly to preserve their freshness.

It is mandatory to keep the store under clean and hygienic conditions, as commodities that would yield profits are stored here for future use by different departments. The store should maintain food safety laws; otherwise the store would be infested with pests and rodents, which in turn would contaminate the food items. Theft, spoilages, infestations through pests and non-accessibility of the products in the store are the four major concerns of any food stores department, and so it is important to have strong control systems in place.

Since the operating costs of the food and beverage department, such as food cost, are related with the issues from the food stores, strict control systems have to be put in place for proper inventory control. Care has to be taken while designing a storeroom for volume feeding, as the packaging of items ordered for bulk cooking would be larger in size than that for retail and would also come at a more competitive price.

The following points must be considered while designing a storeroom for bulk feeding:

- The storeroom should be close to the receiving department as well as to a central position for all user departments should be kept in mind.
- The volume of the business and the type of the establishment also play a major role in the designing of the storeroom.
- Store room should be spacious, free from the pests and rodents.
- It should be low in humidity
- There should be ease of operation and ease of cleaning after goods have been stored.
- It should facilitate the monitoring of goods in store.
- It should have an optimum space utilization design and should have a sufficient number of racks and shelves.
- The type of food store required cold store or dry store should also be considered.
- The storeroom design should aid proper stock rotation methods.
- The storeroom should have proper lighting and should be well ventilated.
- The variety or number of items to be stored with their par stocks and the space required for them should be considered.

- The storeroom should be well illuminated as dark corners can be prone to the pest infestation.
- The flooring should be durable and heavy duty, to avoid wear and tear of the flooring.
- The spacing between shelves and storage cabinets should be kept in mind, and the required space for them needs to be available.
- The store should be always kept neat and tidy. Regular cleaning schedules need to be in place to keep storeroom clean.

6.11 Storekeeping

Maintaining stores efficiently requires a good communication system between the storekeeper and the user departments, to know their needs specifically. Training and experience are necessary for accurate record keeping and negotiating with suppliers. Above all, every storekeeper must have a high standard of ethics because he is in a very vulnerable position, handling stores of value which every man requires and would like to have. He is also vulnerable to getting corrupted by sellers and staff alike.

Store Records

A number of records need to be maintained as foods move very fast in and out of the stores, and it is necessary to be able to account for them at any given time.

Requisition Slip:

This is a request form submitted by user departments to the stores in charge for the issue of required items. Depending on the size of the establishment and the number of user departments different coloured slips may be used for each department.

It is customary to put in requisition slips to the stores at least one day in advance, so that the food items required for the next day are collected and issued in time for food preparation. In large establishments, a separate transit store exists, from which items required daily are used up. When the levels in this store or kitchen cupboard go down, then a fresh requisition slip issued to the main store to mark up the levels.

Name of the Hotel: XYZ Hotel Department

Date

Sr. No.	Food Item	Unit	Amount Required	
	Signature			
	(Requisitioning Authority)			
	la Daguigitian Clin			

Format of Sample Requisition Slip

Stock book:

In this, records of all items received and issued are maintained along with stocks in hand and their monetary value. This enables a storekeeper to see at a glance, the quantities of any particular item in stock at any time. It thus helps him to place orders before stocks are completely depleted.

Order Form:

An order form issued to place orders for supplies with the supplier must be signed by a person authorized to do so. Three copies of an order are prepared, one each for supplier, ordering department and stores in charge who receives the goods when they arrive. Generally, the catering manager authorizes purchase in a small establishment which has a purchasing department.

Order				
From: XYZ Re	staurant		Ref:	
To: ABC Food Suppliers Ltd.			Dated:	
Please supply the	following item	by		
Sr. No.	Item	Quantity	Unit	Value
L		I		I
				Manager
				(XYZ Restaurant)

Format of Sample Order Form

6.12 Food Quality in Storage

Where large quantities of food materials are stored, it is imperative that steps be taken to ensure that the quality of foods does not deteriorate on storage. It is important to know about the factors that can possibly affect food quality in stores. These are:

• Excessive handling:

This can damage packages, making it possible for foods like biscuits, noodles or other cereal products to become soggy or moldy or broken making them unfit for use. Damage to food like fruits and vegetables can cause enzymatic and oxidative discoloration affecting their quality.

• Sunlight:

Sunlight in stores at certain times of the day, falling either upon milk and milk products, or upon other foods containing Vitamin B₂, can affect their contents. Light and heat can also affect the quality of stored oils and fats and foods containing them.

• Temperature and humidity:

Uncontrolled temperatures and humidity can lead to evaporation or absorption of moisture, leading to drying or sogginess the latter providing suitable conditions for microbial growth.

• Infestation:

Attack of cereals and pulses by weevils, presence of white ants in the store, or rodents and other pests can damage the flavour, and quality of foods, making them unfit for consumption.

• Careless staff:

Careless handling of food items by staff can lead to contamination of poorly stored food.

With all these factors in mind, efforts should be aimed at increasing shelf life of foods through care in receiving and storage, while at the same time maintaining quality.

6.13 Summary

This unit discusses about the purchasing systems and the storage related precautions in volume catering. It is very necessary to be well organized in food catering operations, but it is of utmost importance when it comes to purchasing for volume catering.

The purchasing function has to be monitored and controlled properly to maximize the efficiency and profitability of the food catering operation. Factors such as knowledge of the market, kinds of purchases that one wishes to do, specifications, designing the procedure of buying, and receiving procedures are also important and has to be kept in mind while deciding the purchase functions.

The purchasing systems could be impacted by various other factors such as type of establishment, service style, type of function, storage space available, geographical location of the place, financial aspect of the business, and the skills of the employees working in the establishment.

This unit also outlines the various kinds of storage functions carried out in a large catering establishment and certain factors that are to be kept in mind while designing the layout of the storage area. Different kinds of storage areas are used for different types of products and the layout of the food store will be different from the engineering store or chemical store.

Thus this unit focuses on both the crucial factor like purchasing and storage facility in bulk volume catering establishment.

6.14 Review Questions

- 1. Briefly describe the importance of purchasing function in a food control system.
- 2. What do you understand by the term Standard Purchase Specification (SPS)?
- 3. What precautions are taken in care while storing foods of perishable nature?
- 4. Draw the format of Standard Purchase Specification?
- 5. What are factors to be kept in mind while storing food in large quantities?
- 6. What are the principles of effective principles of purchasing?
- 7. What do you understand by the term purchasing methods? Explain any two.
- 8. What are the principles followed during indenting for volume feeding? Explain in detail.
- 9. Mention the factors on which the purchase of the organization depends.
- 10. What are various advantages of the Standard Specification?
- 11. Explain about various purchasing methods used in catering organizations in detail.

6.15 References and Suggested Readings

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- 2. Quantity Food production Operations & Indian Cuisine Parvinder Bali (Oxford Publication).
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Unit-7

Regional Indian Cuisine

Structure of the Unit

- 7.1 Indian Cuisine: A brief introduction
- 7.2 Introduction to Regional Indian Cuisine
- 7.3 Heritage of Indian Cuisine
- 7.4 Catering trends in India
- 7.5 Impact of Religions on Indian Cuisine
- 7.6 Summary
- 7.7 Review Questions
- 7.8 References and Suggestive Readings

7.1 Indian Cuisine: A Brief Introduction

The food available in India is as diverse as its culture, its racial structure, its geography and its climate. The essence of good Indian cooking revolves around the appropriate use of aromatic spices. The skill lies in the subtle blending of a variety of spices to enhance rather than overwhelm the basic flavor of a particular dish. These spices are also used as appetisers and digestives.

Besides spices, the other main ingredients of Indian cooking and Indian meals are milk products like ghee (clarified butter) used as a cooking medium and yoghurt or dahi. Lentils (legumes) or dals are also common across the country and regional preferences and availability determine the actual use in a particular area. Vegetables naturally differ across regions and with seasons. The style of cooking vegetables is dependent upon the main dish or cereal with which they are served. Whereas the Sarson ka saag (sauteed mustard leaves) is a perfect complement for the Makke ki Roti (maize bread) eaten in Punjab, the sambhar (lentil) and rice of Tamil Nadu taste best eaten with deep-fried vegetables.

Although a number of religions exist in India, the two main cultures that have influenced Indian cooking and food habits are the Hindu and the Muslim traditions. Each new wave of settlers brought with them their own culinary practices. However, over time they adopted a lot of specialities and cooking methods from the Indian cuisine and blended the two to perfection. The Portuguese, the Persians and the British made important contributions to the Indian culinary scene. It was the British who started the commercial cultivation of tea in India.

The Hindu vegetarian tradition is widespread in India, although many Hindus eat meat and fish now. The Muslim tradition is most evident in the cooking of meats. Mughlai food, kebabs, rich

kormas (curries) and nargisi koftas (meat-balls), the biryani (a layered rice and meat preparation), rogan josh, and preparations from the clay oven or tandoor like tandoori rotis and tandoori chicken are all important contributions made by the Muslim settlers in India.

Northern India

A typical North-Indian meal would consist of chapatis or rotis (unleavened bread baked on a griddle) or parathas (unleavened bread fried on a griddle), rice and an assortment of accessories like dals, fried vegetables, curries, yoghurt, chutney, and pickles. For dessert one could choose from the wide array of sweetmeats from Bengal like rasagulla, sandesh, rasamalai and gulabjamuns. North Indian desserts are very similar in taste as they are derived from a milk pudding or rice base and are usually soaked in syrup. Kheer, a form of rice pudding, shahi tukra or bread pudding and kulfi, a nutty ice-cream are other common northern desserts.

Southern India

South Indian food is largely non-greasy, roasted and steamed. Rice is the staple diet and forms the basis of every meal. It is usually served with sambhar, rasam (a thin soup), dry and curried vegetables and a curd preparation called pachadi. Coconut is an important ingredient in all South Indian food. The South Indian fast food such as dosa (rice pancakes), idli (steamed rice cakes) and vada, which is made of fermented rice and dal, are now popular throughout the country. The popular dishes from Kerala are appams (a rice pancake) and thick stews. Desserts from the south include the Mysore pak and the creamy payasum.

Eastern India

The cuisine of Eastern India revolves primarily around fish, vegetables and rice. It is lighter than north Indian food as little fat is used in the cooking, which relies mainly on stir-frying, boiling and steaming. The speciality in this region is in the use of mustard and subtly-flavoured spices. The region is famed for its variety of fish recipes, desserts and confectionery. The festive food owes a great deal to Muslim tradition. A meal is eaten in courses, with a progression of flavour from mild to strong in the universal order of vegetables, fish, poultry and/or meat. Meat dishes are followed by a sweet-sour chutney, crisp fried papad, yoghurt and desserts.

Western India

The food of Western India is incredibly varied, reflecting the diverse influences on its history. Each state from Rajasthan to Maharashtra has distinctive culinary traditions. Rajasthan has developed a complex cuisine relatively evenly balanced between Muslim and Hindu vegetarian and non-vegetarian components, with an unique emphasis on game dishes. Gujarat has a largely vegetarian population belonging mainly to the Jain faith. Its food is based, therefore, on pulses, milk products and vegetables, accompanied by a variety of breads. A meal begins with a sweet appetiser. Maharashtra blends of elements from northern and southern India. Mumbai and Goa both have evolved a cosmopolitan table owing to the variety of international influnces on their culture. Mumbai calls its own the distinctive Zoroastrian tradition of its Parsi community as well

as the Irani Muslim strain. It also has a highly developed and popular fast-food tradition which is both nutritious and tasty. Goan food blends Portuguese tradition with the food habits of the Konkan coast.

An Indian meal is usually rounded off with the paan or betel leaf which holds an assortment of digestive spices like lime paste, aniseed, cloves, areca nut, and cardamom.

7.2 Introduction to Regional Indian Cuisine

The Indian sub-continent is the birthplace of Indus valley civilization, hub of culture, cradle of few religions, blessed with a rich heritage and thereby it is so varied in terms of its cuisine. The cuisine of India is so diverse that it has created an influential mark on the world cuisine.

India is the land where past mingles with present; cuisine gets dominated by taste; and spices blend with ingredients inorder to define the Indian cuisine.

This land has experienced extensive immigration and its nature of acceptance from each stream has made it very rich in terms of its cooking traditions. The intrusion from various parts of the world has diversified the cooking culture taking it to the zenith of its mark. Nevertheless of various influences brought into the country by various rulers, invaders and travellers, Indian cooking has not lost its identity, and rather it get elaborated and became richer with the assimilation of the myriad influences.

The fertile land of this country is blessed with the blessings of rivers like Ganga, Yamuna, Narmada, Godavari and Brahmaputra. It also has conducive and favourable weather in various parts of the country which favours the growth of Kharif and Rabi crops and thereby it is rich in terms of its agriculture. It goes without saying that the fertile land supported by irrigations and rainy seasons is best in producing seasonal crop productions. The place rich in terms of land output would undoubtedly be rich in its cuisine and India is no exception to it.

Religious and caste restrictions, weather, geography, seasonal availability and produce and the impact of foreigners have affected the eating habits of Indians and thus its cuisine.

It would be an impossible task to ensemble the cuisine of a sub-continent without comprehending the basic of each state and regions of the country. The country is so diverse, so varied that an old saying captures the variations in rural India perfectly - "Kos-kos par badle paani, chaar kos pe baani"; which translates to – at every mile taste of water changes and every four miles changes dialect (baani). So, to bring the cuisine of such versatile land under one single platform, it has to be started from scratch and then it would demystify itself of its own.

The core essence of Indian cooking lies in the impeccable and exact use of aromatic spices. Whenever there is a mention of Indian food, the first image which comes to mind is that of a variety of spices which are visibly discernible courtesy of their color, flavor and aroma. The skill of the cooks lies in the subtle blending of a variety of spices to enhance rather than to overpower the basic flavour of a particular dish. These spices are used also as an appetizers and digestives. Each spice is characterized by its individual taste, aroma and peculiarity. The spices used are

incorporated in the dish in two forms i.e. in powdered form or in whole form. It would not be unfair to state that the Indian cooking revolves around the magic of spices used in it.

Indian cooking takes place in three stages. The first and foremost is to prepare the base or the gravy. This requires warming the oil with the spices and seasoning. The second stage involves adding the vegetables or the main ingredients and stirring it into the gravy base. The third stage is to allow the dish to simmer until completely cooked. This is the basic technique to prepare the dish in India.

Indian cuisine is not the cuisine of a single nation but it is the resultant cuisine of many religions, communities, and indeed all states. The best adjective for this cuisine is only one and that is Ambrosial. It is versatile in wide-ranging taste, diverse in varied beliefs; and practices and eating-habits of the people of India. No preparation has a standard recipe. Each preparation can be prepared in different ways and methods. No recipe were written in books and then prepared, but the actual recipe has been passed from generation to generation by mouth-to-mouth communication. The recipe of Indian cooking is prepared by 'andaaz' meaning approximation and experience. The spices are never measured by weighing scale or by any other measure but they are added by andaaz. This andaaz is achieved by regular practice and experience.

Indians attribute a lot of importance to breakfast, known as nashta, and this is taken after the customary cup of tea or coffee which marks the beginning of the day. While nashta in north India features rotis, parathas, a vegetable preparation, pickles and curd, in the southern belt it is idli or dosas accompanied by chutney and in the western region it comprises of dhokla and milk. Lunch is an important meal of the day for every Indians and calls for elaborate preparations in form of at least 2-3 vegetable dishes, curd, a variety of desserts and wrapped up with paan. The main dish during lunch varies from region to region but is usually either rice or roti or both. Indian food in the evenings consists of a cup of tea or coffee with some snacks while dinner serves the purpose of bringing together the family followed by desserts which may be traditional fruit-based.

India can be segregated into various sections, in terms of culinary aspects, depending upon its similarity in a single section. The Indian cuisine has been segregated in respect to various directions like North, East, South and West. But as India is so wide-ranging and multifaceted, it would be unfair to do so. It has to be classified as below to have a clearer picture.

The segregation would be:

- The Himalayan valley ranges Jammu Kashmir & Himachal Pradesh.
- The North India– Delhi, Haryana, Punjab, Uttar Pradesh & Madhya Pradesh.
- The Gangetic plains Bihar, West Bengal & Odisha.
- The North East of India The Seven sister states of India & Sikkim.
- The West India Gujarat.

- The Konkan coast–Goa, Maharashtra and Karnataka.
- The Thar desert Rajasthan
- The Deccan plateau or peninsular plateau Andhra Pradesh, Tamil Nadu & Kerala.

In the regional classification made above, few regions have some similarities. The similarities may be due to same practices followed or due to seasonal availability of ingredients of that particular region.

Cuisine of Himalayan valley ranges:

The availability of few ingredients like haak, knol khol, kanaguchhi, saffron, colocassia has made few dishes very unique in this region. Kashmir is a place where wazwan is the aromatic celebratory banquet meal with thirty-six tasty dishes and in Himachal Pradesh the mid-day meal is referred as dham. The cuisine of both the regions has been very different from the rest of the Indian cuisine and same is their dishes. The Kashmiri preparation are distinguishable like roghanjosh, goshtaba, rista, kabargah, tabakmaaz, heddar, etc. whereas the Himachali dishes are based on a huge variety of dals and dishes like madrah, sidu, sepu badi, patande, maahni, babroo etc are very famous.

Cuisine of North India:

The main distinguishing factor of this region cuisine is the gravy preparation. When it comes to Punjab, the seasonal availability and regional produce dominates strongly, hence the dishes like sarson ka saag with makki ki roti has become popular worldwide. Tandoori style cuisine also finds a revered place in the cuisine of Delhi and Punjab. Haryana is also very particular about its preparation like raabri, bajre ki khichri, singri ki subzi, kachri ki subzi, methi gajar, bathua ka raita and so on. The excessive produce of milk is easily felt in the cuisine and dishes of Haryana and Punjab are rich in butter and ghee. When it comes to the cuisine of Uttar Pradesh, Awadhi cuisine plays the key role and it becomes the centre of attraction for the whole national cuisine. Awadh region has gifted many mouth-watering dishes to the Indian cookery. The people from Madhya Pradesh do not have a distinct cuisine of their own, but is based on the cuisine of neighboring states. The number of dishes are not that huge but few with a unique flavour and taste like daal bafla, bhutte ki kees, chakki ki shaak,koprapak, kulsi, bundeli gosht, sighri wala kukra etc. It speaks about Bundelkhand cuisine which is referred as tribal cuisine.

Cuisine of Gangetic plains:

It is that region which is influenced by the river Ganga. The cuisine of Bihar is very simple and relishing too. It has special dishes like makhuni, litti-chokha, belgrami, sattu and so on. The dishes are very healthy and nutritious as well. The Bengali cuisine is symbolized by the rice and fish preparations. Mustard oil is the main medium of cooking. The cuisine of Odisha and Bengal share a huge similarity and has many common features. For example, a five spice mixture combination is used in both the cuisine and is known as panhc-phoran in Bengal and Panch-phutana in Odisha. The similarity is also in sweets of both the region. Rasogulla originated in

Odisha long back but gained popularity in Bengal. Few dishes are common like Rasmalai, Chenna sweets etc in both the states.

Cuisine of North East of India:

The North East of India comprises of eight states which includes Sikkim and seven sister of India. The dishes of this region are very unique and different from the entire country. The paneer of yak milk is referred as chhurpi and is consumed with great zest. Momos and thukpa are the famous preparation. Rice is consumed in large quantity by north eastern people. Rice is also used in preparing local brew beverage. Assam is famous for its tea production. This region has also been blessed by the production of one of the spiciest chillies '*bhut jolokia*' worldwide.

Cuisine of West India:

Gujarat is renowned for its vegetarian dishes. It uses very subtle spices and is relatively rich in texture. The Gujarati thali comprises of roti, dal, kadhi, rice and subzi (shaak). The preparation here has more sweet and sour taste. Gujarat offers a huge variety of snacks collection called as *farsan*. Basically, farsan means snacks which can be anything like salted, fried, and crunchy. Parsi is the commonly found community here and hence dishes are mostly vegetarian. Very rare non-vegetarian dishes like Salli chicken jardaloo is famous.

Cuisine of Thar Desert:

This region has experienced a harsh climate, war-like situations and hence continuous immigrations in the region. All these factors along with lack of availability of vegetables have been a deciding factor in shaping the cuisine of Rajasthan. Game cooking has been very popular in this region. The best-known cuisine is the combination of dal-bati-churma where dal is lentils, bati is baked or fried wheat ball and churma is powdered sweetened cereal. The mutton preparation like lal maas, safed maas, mohan maas and jungle maas are also very popular. It also offers a huge variety of sweet preparation as well.

Cuisine of Konkan Coast:

The state of Maharashtra has coastal as well as arid parts in it and hence the food varies accordingly. It is rich in various vegetable preparations and rice is the staple food grain here. Few preparations are acknowledged all over like puran-poli, modak, pandra rassa, zunka-bhakar, vada pav, shrikhand and so on. When it comes to Goa, the list of famous unique preparation is indeed very long like vindaloo, sorpotel, xacutti, bebinca, dodol and so on. The use of kokum, a purple berry which has a distinct sour taste is very common.

Cuisine of Deccan Plateau:

This region also has few similarities among the states it covers. It consumes coconut in every preparation possible. The cuisine of this region offers famous dishes like dosa, idli, sambhar, poriyal, lemon rice, curd rice, rasam, etc. Generally a special tempering is done to dishes which include curry leaves, mustard seeds, whole red chilli, asafoetida etc. They have a tradition of

eating food on plantain leaves using hand. The communities of chettiyars, iyengars, malabaris have also dominated the cuisine of this region.

Thus in short, the cuisine of India has been the cuisine of Aryans and Dravidians, it is the cuisine of all religions, all communities prevailing here and indeed of all states. It has a very peculiar aroma of all the spices and unique taste of diverse culture and eating patterns. It is so ambrosial in nature that by just knowing about this celestial cuisine would engulf any one in its love, magic and charm it spells. No one can remain spell bounded by the charm of this cuisine.

7.3 Heritage of Indian Cuisine

• The Pre- Ancient Era

Referring to the plethora of references of what man use to eat, fruits appeared to have been his main dietary item during the Eolithic (early phase of Stone Age) period. With the passage of time, meat began to enter the meal of Homo Stabilis. During the early Stone Age, man hunted animals and as hunting skills improved, the consumption of meat increased apparently.

About 10000 BC, the development of agriculture changed the dependence on constant hunting for animal foods. Within few millennia, meat consumption declined and dependence of vegetarian food increased.

The pattern that characterize the kind of food man consumed can be deduced from certain evidences from the tools used, surviving words etc.

About 250000 years ago, during Paleolithic (second phase of Stone age) period, man use to use tools like heavy clubs, cleavers and axes to club down the animals have been uncovered from various sites in India. During Middle Stone age (about 50000 years ago), tools like pointed stones, axes, spears, knives draw attention to the fact that the man use to have meat as the main diet.

During New Stone Age or Neolithic times, the tools got more finished and refined. Such tools have been found all over the country and again connote to the fact that meat was an essential diet.

About 7000 years back, clay boiling pot was discovered and about 5000 BC man became a cultivator. About 3000 BC with the emergence of metal age, man changed his tools, started cultivating food and led a comparatively settled life. Around 5000 BC, tools uncovered in India suggest that an important change occurred from food-gathering to the food-cultivation stage, from a nomadic to a settled life.

Food history in India is as old as, perhaps the existence of man.

• The Ancient Era

In India, this era was referred as Praachin Yug.

The Ancient Era can be said to be a period from 2500 BC to 350AD.

It begins from the Indus Valley Civilization which flourished for a thousand years and is the earliest known civilization of South Asia, corresponding to the Bronze Age cultures.

It has been analyzed that even before Indus Valley civilization, cultural evolution had taken place in the North and North-West of India and it brought a lot of prosperity.

During the Harappan period, when Indus Valley civilization was on its peak and Harappa, Mohenjodaro, Chanhudaro, Kalibangan and other areas were buzzing and clamouring with the trading activities. Fruits like ber and dates were known, and several wild animals were used as food. Various animals like sheeps, buffalo, and horses were domesticated to be used in various aspects. Wheat of various varieties, at least, four varieties and Barley were raised as a staple diet. Pulses like peas, chana, bengal gram find mention. Evidence of sesame seeds and rice were also found. Cereals and pulses would have beeen in plenty that is why, elaborate arrangements for mass storage of food grains, and were integral part of this civilization. It is still a question in which form these cereals were used in those days. Flat metal and clay plates resembling modern 'Tawas' have been found in plenty at Harappan sites, suggesting that the baked Chapati may have been known.

'Boiling pots' prove the evidence of cooking done by boiling on 'Chulas' (recovered from excavation sites). Many other pots and pans of copper for cooking and frying and the cups, ladles, kitchen knives, clay plates and other tools excavated reveal the fact that even then, tasty cooking and eating were enjoyed.

Basically Harappan civilization was the urban one, flourishing trade was maintained between the countries by sea and land routes. Cotton and cotton goods, barley, sesame and linseed oils, a variety of woods, gems, stones and copper etc. were exported.

The Harrapans knew the domestic fowl, but its remains are few and negligible. The jungle fowl is believed to the progenitor of the poultry in the world. Then poultry were used for purposes of food, eggs, and cock-fighting only after 600BC.

Cooking operations used during those days were:

'Thalanam' (drying), 'Kvathanam' (par-boiling), 'Pachanam' (cooking in water), 'Bhavita' (seasoning), 'Apakva' (frying), 'Putapaka' (baking), 'Svedanam' (steaming), 'Bharjanam' (dry-roasting), 'Thanduram' (grilling).

Devices for these operations developed in parallel along with these cooking operations.

A big question mark today also and only speculation is made in this context is how the cereals were consumed and in what form. Flat metals plates and clay metal plates resembling thavas (griddle) have been found in plenty from Harrapan sites during excavation. Along with this, many circular ovens were also found at Indus Valley sites. Both above ground and underground mud hearths (tandoor) were found in Kalibangan. Chulas carrying knobs with one to three openings have been unearthed at several sites.

Indian Cooking derives its history from about 4000 years old timeline during which culture has changed; geographical boundaries have changed significantly leading to confusing terms such as sub-continental cuisine while other parts of a region want a separate culinary identity.

Most people believe that the Ayurvedic tradition of cooking, which is a complete holistic approach to cooking, evolved at this point of time. This lays the foundation of the concept that everything we eat affects both our body and mind; therefore food should be pure from nature and balanced.

During this era, Aryans invaded our country and made Dravidians to shift in the Southern part of India and the cuisine there was largely vegetarian. The roots of Hinduism are shaped at this point; the Vedas or the religious texts were developed at this point as in the Mahabharata. The caste system was developed at this point in time, dividing food habits of the people broadly by caste, for example – the Brahmins were made vegetarians while Kshatriyas were suggested as non-vegetarians.

Thus, Ancient era is marked by the Hinduism which was followed by all including Aryan and Dravidian.

• The Medieval Era and Modern Era

In India, Medieval era is referred as MadhyakaalinYug and Modern era was referred as Adhunik Yug.

Medieval Era, also called as Middle Ages, lasted from about AD 350 to about 1450.

The adjective *medieval* comes from the Latin words for this term, *medium* (middle) and *aevum* (age).

Modern Era commenced from after 1450 and is continuing till date.

No single event ended the ancient world and began the Middle Ages. In fact, no one who lived in what is now called the Middle Ages ever thought of themselves as living in it. In the Middle Ages, people thought they were living in modern times, just as people do today.

Hinduism was the religion being followed by Aryan and Dravidian from the ancient era itself.

Medieval era saw the booming of two crucial religion shaping India i.e. Buddhism and Jainism. The later has a marked influence on the cuisine in some parts of the countries. Jains were strong believers in non-violence; traditional Jain cuisine apart from being cooked without meat was also cooked without onion and garlic.

This period was the period of several North Indian dynasties, including the Gupta dynasty, which was noted for its love of the arts and there were several visiting travelers during this time. This was also known as the Golden Age of India Art, there were several travellers who visited India and carried with them knowledge and products like tea and spices.

This era is marked by the flourishing of various religions and during this era, few religions actually got their shape in India in which they are in current state. India has also witnessed the conquest of rulers like Mughals from west and hence came the Islam in India.

Each religion has their own culture and so is the cuisine. Indian food has been influenced from time to time by the invaders and the people of other faiths who made India their home.

Timeline of Indian cooking:

Indian cooking derives from a 4000 year old timeline, during which culture has changed; geographical boundaries have changed significantly leading to confusing terms such as subcontinental cuisine while other parts of a region want a separate culinary identity.

Indian cooking has however evolved significantly over time and the varying influences brought into the country by the various rulers and travelers, it has not lost its original identity, rather become richer with the assimilation of the myriad influences. This is very apparent in some of the unique regional cuisines, which we will discuss later. The following historical timeline is from a culinary perspective rather a complete historical guide.

2000 BC and earlier: Most people believe that the origins of Indian history and therefore the cuisine are as old as mankind itself. The earlier formal civilization is the Mohenjedaro and Harrapan Civilization, which is at about 2000BC. Most people believe that the Ayurvedic tradition of cooking which is a complete holistic approach to cooking evolved at this point in time. This lays the foundation of the concept that everything we eat affects both our body and mind; therefore food should be pure, from nature, and balanced. The core balance consists of balancing the six tastes-Sweet, Sour, Salty, Pungent, Bitter, and Astringent. These tastes relate to the attributes of Essence and Effect.

1000BC:At this point we see the first movement of outsiders into the country; this forms the origins of the Indus Valley Civilizations. The Mohenjo-Daro people are believed to have been pushed to the Southern Part of the country and the cuisine there is still largely vegetarian. The roots of Hinduism are shaped at this point; the Vedas or the religious texts are developed at this point as is the Mahabharata. The caste system is developed at this point in time, dividing food habits of people broadly by caste, for example the Brahmans for the most part were vegetarian while the Kshatriyas were non-vegetarian.

600Bc: We see the emergence of Buddhism and Jainism; the later has a marked influence on the cuisines in some parts of the countries. Jains were strong believers in non-violence; traditional jain cuisine apart from being cooked without meat was also cooked without onion and garlic.

400 BC: parts of India were ruled by Alexander the great, in the 326BC period, but generally this period of the Mauryan dynasty.

The Mauryan dynasty especially King Ashok was responsible for the further development of Buddhism, this period also saw the development of Buddhism outside India, which would leadpeople to people there must have been some cross-pollination with food. There are references to the development and production of several varieties of natural liquor that were consumed for recreation. The Mauryan economy was also agriculture driven which resulted in the base of all the grain cuisine in India.

AD-1200: this period was the period of several north Indian dynasties, including the Gupta Dynasty which was noted for its love of the arts and there were several visiting travelers during this time. This was also known as the Golden age of India Art, there were several travelers who visited India and carried with them knowledge and products like tea and spices. In the south of India notable dynasties were the Hoyala Dynasty. But from a culinary perspective there are still no significant external influences brought into the country.

1200-1500AD: this period is the Muslim Invasions and the first entry of several foreign invaders into the country. Vasco Da Gama arrived in India in 1948 to explore opportunities for trade which later resulted in colonization of parts of India by the Portuguese; the most notable example of this influence is seen in the cuisine of Goa, in Western India. The Khilji Dynasty ruled a significant period of time, an interesting travelogue of this period is provided by Ibn Batuta a Moroccan traveler in the court of Mohamed bin Tughluk. In one instance he describes a meal served to him where is outlines the use of ghee, yogurt, pickles, and that it comprised of several courses including a milk-based dessert.

1500-1800AD: this is the period of the Moghul Empire and the empire and the emergence of the Moglai cuisine that people now associate with India. It includes the addition of several seasonings like saffron, the addition of nuts and cooking in the "Dum" or sealed pot method of cooking. In the south of India, you have the Sultan dynasty in Hyderabad where the similar influences are permeated into the region. There is a continuation of other European influences in parts of south India such as Kerala where you see the beginning of the Syrian Christian cuisine.

1800-1947AD: This was the period of the British rule in India and the love affair of the English with Indian Food.

This generally was hardly a glorified period in Indian history, but the British loved the general elaborate way of eating and adapted several of the food choices to their taste and developed the "curry" as a simple spice to help them cook Indian spice. This period resulted in the emergence of the Anglo-Indian cuisine and the emergence of certain "Raj" traditions like that of "high-tea" an elaborate late afternoon meal with tea.
1947AD: this the post-independence period which changed Indian cuisine to sub-continental cuisine the Indian land mass was divided into several countries most notably Pakistan and Bangladesh, that inherited the following ancient history that has developed into today's culinary tradition.

7.4 Catering Trends in India

Every region, every state and every country has their own eating trends. Similarly their catering trends are also different altogether. India is no exception to it. India has depicted its catering trends based on people preferences which keep on changing with the passage of time, with accumulation of sufficient money and different lifestyles as well. The catering trends in India have developed over period of time and have got more refined as compared to earlier period. Here, eating at the roadside is also a fare, eating in a dhaba like eateries is a different experience altogether, whereas those dine in five star hotel have a different sense of sophistication. In short, the various catering trends are as such:

Road Side Food

The concept of roadside food is very old and ancient in India. It has its own specialities, features and charm. It is a one man show, seller himself is generally a cook too, and prepares a few snacks or specializes only in one item and sells whatever he prepares. Mostly he stations himself on particular place and buyers start recognizing him for the quality of his preparation.

The highlights on this kind of food are:-

- Roadside food sellers generally prepare snacks and the choice is limited.
- Since the seller sits on the road sides, the food is of low cost, hence affordable by all.
- Roadside snacks vary from state to state, e.g. Wada Pav, Batata Wada or Bhajias in Maharashtra; Bread Pakoda, Chole Bhature, Fried Fish, Sheek Kababs, Chaat, Kulfi, Icecream and a variety of Pakodas in North India; Medu Wada, Idli and Dosa Chutney in South India.
- This kind of food is handed over, generally on a piece of paper or at the most, in a paper plate.
- Mostly the sellers of Roadside food station themselves near the bus stops and railway stations, parks, schools or colleges, cinema houses, residential areas and markets.

Dhaba Food

Literally speaking, a 'Dhaba' means a roadside eating-house, a kind of fast food joint located along side a highway to cater to the needs of travellers. The concept of dhaba was born out of necessity. It originated in Northern parts of India, when vehicular movement facilitated long-distance travel.

A dhaba then meant a small shack serving as a kitchen, located invariably near a fresh-water well or river, and a few camp-cots arranged randomly under a large shady-tree where the travellers could break their journey, rest a while, satisfy their appetites and restore their energies for the onward grind. It was supposed to be, and was, a simple fare. There was nothing pompous about it like the modern-day motel. It served only the basics and that too, at affordable price, a Dal, subzi and roti, to be washed down with, naturally, cold water from the nearby well or river.

Though there is no dearth of real-sense dhabas all over the country, yet in recent times the concept of dhaba is undergoing a paradigm shift. It has now caught the eye and fancy of big time entrepreneurs, leading to a number of 'dhabas' springing up even in the cities. These stylized dhabas now are a part of big hotel chains, and vast sums of money are spent in their design and decoration. However, but for the laboured mimicry of a 'real' dhaba layout, an urban dhaba is manual and rich like ornate eateries. Needless to say, the fare served in such eating places is expensive and out of reach of the commoners. Only a few with pocket loads of money to spend and yearning for a variety, can frequent such dhabas.

Nevertheless, there are some fundamental differences between restaurants and dhabas notwithstanding their location:

- A dhaba always has an open see-through kitchen unlike the restaurants where the cooking is always done behind closed doors and out of sight of the customers.
- A restaurant has an arrangement of tables and cushioned chairs whereas the visitors to a dhaba are made to use cots for informal sitting and eating.
- Unlike the restaurants, the food in dhabas is served sans cutlery. Only serving spoons are provided to encourage the actual eating with hands (which can really be a great pleasure).
- Decor of a dhaba is deliberately kept simple. In poorman's dhaba, it happens automatically (to keep the establishment costs to the minimum possible), but in made-up dhabas, all care is taken to duplicate the natural ambience of roadside dhabas, even if that entails heavy expenditure.
- Real dhabas serve only the essential fare. Even in the made-up dhabas, menu is not complicated.

> Five star hotel Food

Along with the Roadside food, Fast food and the Restaurant food, the concept of the Five Star food, too, has created a niche for itself in India. Even though this concept is comparatively new, but it is not new to the affluent of the society. Presently, even the upper middle class people have started patronizing the Five Star hotels in India. Since the food in Five Star hotels is very expensive, it is affordable only by well to do people of society, the employees of bigger organizations / multinational companies, the bureaucrats, and the foreigners. The facts about Five Star foods in India are listed below -

- The food in Five Star hotels is prepared by the professionals graduated from the Catering Colleges and such other training institutes. Therefore, right from the cutting of vegetables / meats, preparation of dishes, their appearance, taste and presentation all is taken care of by the professionals employed by the hotel industry.
- The food here is more innovative in nature since it is cooked on order; hence it is a la carte.
- The food is supposed to be more hygienic. Nowadays HACCP (Hazard Analysis Critical Control Point) has taken care of this aspects in almost all classified star hotels.
- Here food is served in a pleasant atmosphere, especially created for the client.
- Food is served in several courses, with all etiquettes in the finest of crockery and cutlery. Due to these reasons, the bigger organizations hold their seminars and conferences in the Five Star hotels. Affluent hold their private parties, kitty parties, wedding functions and other social gatherings in these hotels to get the Five Star service.
- It is basically, the comfort, the service, the atmosphere, the elegance, the glamour and the style which attract the people to the Five Stars hotel in India.

➤ Fast Food

The concept of Fast Food originated in America, by and by it spread all over the world. With the origin of Fast Food the traditional ways of serving, eating, and enjoying food, has given in and the avenues have been opened for more informal and unconventional methods. After the industrial revolution all over the world, working culture is on rise. Thus people (immaterial of sex, cast and creed) are always on the move and no one is left with enough time to sit down and eat. Infact, they like to grab something which can be just rolled, assembled and handed over, so that they can enjoy it even when on move. By the time you finish off paying the bill for the food items, your choicest food is ready.

Since this culture is on rise, it has become fashionable in India, too, to patronize such fast food joints which provide the snack food of your choice. All kinds of food items right from the pizzas, rolls, burgers, frankies, chicken and mutton preparations, are available in almost every town in India.

Though the concept of Fast Foods is new, it is not new to Indians. From the good old days to the modern era Indians always sold certain products which people used to buy and enjoy just passing by or standing on one side of the road. Chaat, bhelpuri, chole kulche, chole bhature, sheekh kebab, kati kebabs, fried fish, kulfi, biryanis, vada pavs and number of sweet items are examples of this concept.

7.5 Impact of Religions on Indian Cuisine

➢ Hinduism

According to Hinduism, food is certainly a characteristic and gift of Brahma to mankind (annam parabrahma swaroopam). As it is a gift from God, it should be treated with great respect. The gross physical body is called annamayakosh or the food body, because it (the body) is nourished by food and grows by absorbing the energies from the food. Puritan Hindus offer food to God mentally before eating.

Hinduism emphasizes to be careful about their food, because what human being eats decides their physical well being as well as their mental makeup. Eating very gross foods like animal meat and heavy or intoxicating food, may lead to the strengthening of animal qualities and lethargic nature in human being. This is one reason why Hindus do not prefer to eat non-vegetarian food. Another reason is their belief that killing innocent and helpless animals for the purpose of filling ones stomach is a bad karma (bad task) with harmful consequences.

Not all Hindus avoid eating meat. A great majority of Hindus eat it. In ancient India even the Brahmins were said to be eating certain types of sacrificial meat. Hindu law books do not prohibit the eating of meat in general, but only certain types of meat.

Food is associated with a lot of religious activity. Food is invariably offered to God during most of the religious ceremonies. On specific days in a year food is offered to departed souls. Food is also distributed to people at the end of many religious ceremonies. Many Hindu temples distribute food freely every day to the visiting devotees. Hindus believe that serving food to the poor and the needy or to a begging mendicant is a very good karma.

The main foods eaten by migratory dwellers included fruits, meat, and fish. They also picked wild berries as part of their diet.

Rice, wheat, barley and barbecued animals flavoured with spices and fruit formed the basis of the cuisine of rich Indians of the past. Then as now, it is rice which formed the basis of most meals. The type of rice determined how it was prepared. Short-grained rice was pounded into flour and then used to make the pancakes known as chapattis which are still a very important part of the Indian cuisine. Long-grained rice was generally mixed with vegetable broth to form a kind of gruel. Medium-grained rice was the most commonly used as the basis for meals. Indian households resounded to the sound of the regular beating of mortar and pestle as the rice was separated from its husks, before being sorted and then rinsed regularly. It was then cooked in water brought to the boil. This rice could be a meal in itself, and often was for the poorer people who would be grateful enough for it. Alternatively, it could be served flavoured with ghee (clarified butter) or mango juice or garam or other spices.

Rice was heaped up on a plate and cooled with fans so that people could eat when they were ready. The most common side dish was the kind of curds still served today in northern India and elsewhere. Beans, barley and wheat were other staples which were used to create basic dishes, flavoured with the three base spices, to accompany the rice. The presence of meat varied depending on religious belief and caste. The kshatriya caste was, in general terms, the only caste

rich enough to be able to have meat on a regular basis and not to be forbidden it. Animals and fish might be prepared in various ways: those of a suitable size could be barbecued on a spit, basted with ghee and marinated with spices, while others might be boiled with fruit or bitter herbs, tamarind or sorrel. Useful or milk-giving animals were generally not killed, although exceptions were made for gazelles. The fear of lack of food remained constant and there was very little waste. Spices formed an appetizer between dishes and also provoked thirst.

The purpose of all cooking of course is to convert potentially edible material into palatable form that is 'Ahara'. In the Hindu ethos there is the added requirement that it should be both auspicious and ritually pure for those who are to eat it.

Moreover, this fact cannot be ignored that in ancient times, Rishis and Munis, meditating in the deep woods and forests, used to survive on this natural food cooked without fire. They used to enjoy an excellent health and lived much longer. Food cooked without fire or assembled in certain ways is still being used in India as one of the natural cures, as a medicine for many a disease since time immemorial, but this kind of treatment is generally given for a specific period. After recovering from the illness, the patients start taking cooked food with fire too, but in a certain proportion.

Buddhism and Jainism

Buddhism and Jainism were born out of Hindu Matrix of Vedic period. Therefore, the basic structure of food did not change.

With Buddhism, the spread of vegetarianism in India flourished. Buddhism is far more practical in their approach to consumption of food as compared to Jainism. For the followers of Jainism, restrictions of food are far more severe than those of orthodox Hindus. The Eastern India, Bengal and Assam felt the breath of Aryanism much later than the rest of the country, perhaps only after the spread of Buddhism.

The early literature of Buddhists and Jains reveals the food concepts of the followers of Buddha and Mahavira in detail.

Staple diet during that period was Rice, either boiled, or cooked with sesame seeds, or made into gruel, or even cooked as a sweet dish. Pulses used at that time were peas, arhar, chana, mung and urad etc. Pulses were eaten as soup (supa), vadas (vatakas) and papads (parpatas). Milk and Milk products were used freely. Many sophisticated sweets like mondaka, madhusarika, moreandaka and ghratpura were made. Payasa (Kheer) was the most popular one. Vegetables like lotus stem, cucumber, bitter gourds, waterchestnuts, gourds, fenugreek, yams, spinach, ginger and radish were used. Fruits like mango, indian fig, jamun, bananas, jackfruit, grapes, phalsas, karonda, citrus fruits and coconut find mention. Spices were used and salt was a rarity. Honey was replaced by jaggery and sugar. Even Brassica leaves were used as a tasty relish. Mustard seeds were used as a spice and as a powerful agent to ward off evil spirits. Sesame and safflower seeds were mentioned as sources of oil in the early Buddhist literature. Buddha allowed his followers

the use of animal flesh on occasions when the killing had been unintentional, and the use of animal fats when monks were sick.

Infact, with them came the different methods of cooking, new use of many Indian ingredients and new ways to combine many fruits and dry fruits with milk, milk products, cereals, pulses and meats.

> Jews

The Jewish people are among the oldest of the many peoples known to history. Their origins date back at least 3,000 years, and perhaps even further.

During this lengthy period Jews have settled in all parts of the world and have had an impact on many civilizations. The Jewish religion, Judaism, has exerted influence far beyond its own adherents, and Islam accepted many of the traditions and practices of Judaism. By and large Jews in India follow the dietary laws set out in the Old Testament.

Universally they follow:

1) The ban on eating of pork

2) Cutting the animal by the jugular vein.

3) Not eating the shell fish or seafood. Orthodox Jews generally do not eat meat at the same time when dairy products are consumed.

4) They use separate utensils and vessels for preparing food of different nature.

> Christians

Christianity, the most widely distributed of the world religions, has substantial representation in all the populated continents of the globe and india is no exception to it.

Christianity grew out of Judaism (Jewish religion)

There are two types of Christians in India.

1) Syrian Christians of Kerala who were converted by the Apostle of St. Thomas.

2) Catholics who came with Portuguese colonialism in Kerala and Goa.

Syrian Christians had a few food taboos, but over a period had some preferences out of local food available.

The fusion of Portugese cuisine with the raw material of Goa created in fact, a distinctive and more regional, Goan cuisine.

Portugese Christians in Bengal markedly influenced the making of sweets there. In Pondicherry due to French influence for 400 years - a variety of Bread, Pork Based Sausages, Pates, Stews,

Fried Meat Balls, Steamed Fish served with Mayonnaise, Fish Croquettes and many desserts became popular.

➢ Islam

In North India many traders and invaders started coming around AD 998. By the 10th century Turkish Muslims began invading India, bringing the Islamic religion to India. The Ghaznavids, a dynasty from eastern Afghanistan, began a series of raids into northwestern India at the end of the 10th century.

Then the Moghul dynasty was set up by Afghan Babar which rose to glory by Akbar and for two centuries they ruled the country. This had a deep and fundamental effect on Indian cooking.

Dietary injunctions are derived both from Quran and the Sunnah which are the recorded words of Prophet Mohammad.

It was mandatory to kill an animal by halal, swine flesh is prohibited, alcohol is a taboo too, but seafood was allowed. Muslims believed in wasting no food, even left overs were being eaten (Contrary to Hindus who used to throw the left over food, perhaps for the birds and animals) and the necessity to share food with others. They introduced community eating.

Dates, Figs, Honey, Olives, Milk and Milk products are specially recommended as food in the Quran. With Islam the dishes like Pulaos, Biryani, Shulas, Haleem, a variety of Kababs, Tikkas, Naans, Sherbets, Phirni and Seviyan, were either introduced or some of them staged a come back. However, like their Hindu counterparts, Muslims, too, enjoy the dishes made of Fish.

Sweets like Kheer, Laddu, Jalebi, Halwas, Burfi, Sohan Halwa, Raitas, Chutneys, Morabbas and Pickles are the integral part of their diet. The historical etiquette and food habits of the mainstream Muslims came with Moghul kings and emperors.

Zoroastrianism

Parsis or Parsees, followers of the ancient Persian religion known as Zoroastrianism, are inhabitants of India, Iran, and Pakistan. Their ancestors fled from Persia (Iran) in the 7th and 8th centuries to avoid persecution by Muslim invadersand came to India from Iran first near Gujarat and then in the mainland.

Parsis had a few food restrictions but voluntarily they adopted some Hindu customs, e.g. prohibition on beef. Their dishes themselves are a blend reflecting both Iranian ancestry in its strong non-vegetarian components and local Gujarati cuisine.

Iranian influence shows itself in the free use of nuts, raisins, and sultanas; chutneys, morabbas and snacks have been adopted from Gujaratis.

➢ Sikhism

Sikhism is the major religion of India founded by Guru Nanak in the 15th century. Like Buddhism and Jainism, Sikhism (500 years before) also crystallized out of a Hindu matrix, and is one of the indigenous faiths. Punjab is the historic homeland of Sikhism, but it has also spread to other parts of northern India, and a significant diaspora exists in Europe and North America.

Therefore, in terms of food practices, Sikhs have all features in common with the Hindu ethos. Their holy book Guru Granth Sahib was compiled by the fifth and the tenth guru, Guru Arjun Dev and Guru Gobind Singh respectively (this is a collection of writings by twenty authors who span six centuries, with those of six Gurus forming the bulk). Nowhere the Gurus mentioned any dietary injunctions, though in practice some have emerged. Khalsa tradition is embodied in the Rahatnamas or codes of conduct complied by several contemporaries of Guru Govind Singh.

In practice alcohol is forbidden and so is beef but not the pork. Abstinence from tobacco in any form is recommended. Slaughter is performed by jhatka. At any happy or sad occasion Kaval Prasad (a special wheat halwa) is prepared, which is served to all attending the ceremony as a prasad, followed by a Langar (people of all religions sit together on the floor in rows and a meal is served). Sikhs eat meat of a lamb and call it a Mahaprasad.

They enjoy poultry and seafood too.

7.5 Summary

This unit deals with the brief introduction of Indian cuisine and brings into light the varied and very diverse cuisine. It comes into knowledge that Indian cuisine is not a cuisine of a single nationality but a cuisine of different and varied people, culture and diversity. This sub-continental cuisine is very rich in terms of its heritage and its origination. It is explained how it has taken its current shape and how it came into its existence and how it is continuing to mesmerize people by its ultimate taste and cooking procedure. Various religions have played a key role in shaping the cuisine of India and this has been explained thoroughly in this unit. The restrictions by various religions and their beliefs have also played a crucial role in shaping Indian cuisine and this has been demystified properly in this unit.

6.6 **Review Questions**

- 1. Write a brief note on Indian cuisine.
- 2. Explain how Indian cuisine came into existence and how it gained popularity.
- 3. What are the major impacts of various religions and how it has helped in shaping Indian cuisine?
- 4. What are the various food eating trends in India? Explain them briefly.
- 5. What are the salient features of Food eating pattern of Hinduism in Indian Cuisine?
- 6. What are the salient features of culinary pattern of Sikhism in India?

7. How the concept of Dhaba eating pattern in India evolved? Explain briefly.

7.7 References and Suggestive Readings

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- 2. Larousse Gastronomique Hamlyn Publication
- 3. Taste of India Madhur Jaffery (Pavilion Publication)
- 4. The Illustrated foods of India K. T. Achaya (Oxford Publication)

Unit-8

Northern and Eastern States of India

Structure of the Unit

- 8.1 Introduction
- 8.2 North Eastern States
- 8.3 Punjab
- 8.4 Bengal
- 8.5 Kashmir
- 8.6 Uttar Pradesh
- 8.7 Uttaranchal
- 8.8 Summary
- 8.9 Review Questions
- 8.10 References and Suggestive Readings

8.1 Introduction

India is a very diverse country with a very varied culture, climatic conditions and diversity. Each states of it have uniqueness and it gives it individuality. There are many factors which lends them its characteristic feature. The agricultural produce and seasonal availability also plays a key role in defining the regional cuisine of the country and states are no exception to it. The culture and eating tradition has been very varied in each state and this gives it a uniqueness altogether.

8.2 North Eastern States of India

North East Zone of India consists of seven states. These are popularly called "Seven Sisters of India".

States which come under this zone are:

Arunachal Pradesh Assam Meghalaya Nagaland Manipur Tripura

Mizoram

Arunachal Pradesh

Arunachal Pradesh is a state situated in the northeast part of India. Arunachal Pradesh means the "land of the dawn-lit mountains" or the "land of the rising sun". Due to its geographic position the sun hits the land of this state earlier before spreading its rays to the other states or regions of India.

Arunachal Pradesh is a brilliant blend of the diversified tribal communities and the individual influences of the various tribes reflect on its cuisine as well. The simplicity of the tribal culture, their lifestyle and the availability of the local ingredients has shaped the unique cuisine of Arunachal Pradesh. The cuisine is undoubtedly varied as the lifestyle of the various tribal communities inhabiting this hilly state. The cuisine features a subtle taste that can be described as bland but has its own flavors to keep the eater mesmerized with the lingering flavors and taste. The non-spicy food is often aromatic and seldom fried. Dishes are usually seasoned with the locally available bamboo shoots, which is an important ingredient in their cooking styles. Various edible herbs are used to season and flavor the dishes.

Arunachal Pradesh is an agricultural state, rich in the production of cereal crops. Rice, buckwheat, soyabean, wheat, millet, sugarcane, oilseeds and maize are common crops of the state. These crops are extensively used in the everyday meals as well as meals cooked to mark special occasions. Fruits and vegetables of various kinds are widely cultivated throughout the state and extensively consumed by the people. Oranges, plum, peach, pineapple and cherries are largely produced and consumed in the state. Lettuce is highly popular in Arunachal Pradesh. While leafy vegetables and maize are common in their food, they are basically meat eaters and non-vegetarian dishes form the core of their cuisine. The natives love to savor fish and eggs besides the meat varieties like chicken, pork and mutton.

People in Arunachal Pradesh use brass utensils to cook food.

Alcohol is a vital part of the cuisine of Arunachal Pradesh and is usually served after every meal.

The cuisine of Arunachal Pradesh cannot be captured in words as the taste is beyond description and the number of items is beyond imagination. Every major tribe has many sub-tribes and each sub-tribe has a unique method of cooking distinct items and relishing them.

Assam

Assam, situated in the north eastern part of India, is adorned with natural beauty. This is a mesmerizing land blessed with beautiful hills, splendid valleys, green forests and the mighty river Brahmaputra.

Assam is the world's largest tea growing region and is renowned all over the world for its rich, strong and distinctly flavored tea. The food of Assam carries the influence of the climatic

conditions as well as the cultural variation of the people. Like the Assamese people, the cuisine of Assam is also very simple and easy to cook. Yet, this discriminating cuisine has a unique flavor and taste which has stood the test of time.

The kitchen was a domain of the women. They were expected to develop their culinary proficiency. The kitchen of the Ahom king was best left to the care of the 'Sangmais'. They were usually drawn from the Barahi community who were known for their quality cooking and faithfulness. The officials who supervised the working of the kitchen were called Sangmai Barua. The Sangmais had no copybook to follow. They developed their own expertise to suit the varying tastes of different kings and queens

The main meal of the day was taken at about noon. The boiled rice was taken with varieties of accompaniments. Thus, rice is a part of a traditional breakfast and of snacks and on special occasions a unique class of rice cake preparations called "pitha" is dished up. Taste was the keystone of the Assamese cuisine. There are six tastes- sweet, sour, salty, pungent, bitter and astringent.

Fish is an important part of the Assamese food culture. Assam being a hilly region, various fruits and green vegetables are found here, which form a part of the everyday meal.

Meghalaya

Meghalaya or "Abode of Clouds" is a mesmerizing land of natural beauty and experiences heavy rainfall during the monsoons.

The cuisine of Meghalaya carries a distinct flavor and unique taste of its own. Meghalaya is home to three Mongoloid tribes, namely Khasi, Garo and Jaintia. The cuisine of Meghalaya is mainly non-vegetarian in nature and carries a hot and spicy feel.

The staple food of the natives is rice accompanied with spicy meat and fish dishes. In fact, rice is the basic food item that is indispensable in any complete meal. A particular kind of rice called the red rice grown locally is relished by the people for its delicious taste. The local people rear ducks, cows, goats, pigs, fowls and consume their meat. Besides these, dry fish, bison and deer are also relished by the locals. Pork is immensely popular among the people of all the three tribes. The cooking style of Khasi and Jaintia community has a few similarities and they use black sesame seeds to temper the pork dishes as well as other preparations. A cold salad made from shredded pork, onion and ginger is quite popular among the natives.

Mushrooms are cultivated during the monsoon and enjoyed hugely in the state. Various types of mushroom are used in the local cuisine. They are served as fried delicacies or are cooked along with meat to add extra taste to the dishes. As rice is a popular item, several rice based dishes and snacks are relished in this hilly state. Rice cakes are popular among the natives and are known as putharo. Pumaloi is another variety of dry and flaky rice cake made from rice flour. Among the snacks deep fried, jaggery sweetened pukhiein and steamed pusha are common delicacies savored with tea.

Nagaland

Nagaland is a state that is mostly covered by lush mountains, which gives the land a unique beauty. Not only is the beauty of the land wonderful but the cuisine is also a delectable fare.

Nagaland is a land rich in culture and cuisine. The various Naga tribes have their unique dishes and the cuisine is never same for any two of the tribes. A typical Naga meal comprises of rice accompanied by a meat dish, a couple of boiled vegetable dishes and chutney (tathu). A distinct characteristic of the Naga cuisine is that dishes are cooked by boiling the ingredients instead of frying them.

The people of Nagaland are patrons of non-vegetarian food. The nature of the food is hot and spicy. The dishes of this cuisine have a unique taste which is enhanced by the flavoring of the items by the local ingredients. Meat forms the main basis of the dishes of this cuisine and is cooked using various methods. Often the meat and fish are smoked, dried or fermented. Pork meat is highly popular in this cuisine. Pork meat cooked with bamboo shoots is a popular dish of this cuisine. Smoked meat is prepared by keeping the meat above the fire or hanging on the wall of the kitchen for 2 weeks or longer, which could last for the whole year ahead. The garlic and ginger leaves are also used in cooking with meat.

Since the cuisine is spicy in nature, seasonings occupy an important place in the preparation of food items. Chilies are an integral part of the cuisine of Nagaland and are used in most of the dishes. The ginger used in the Naga cuisine is spicy, aromatic and is different from the common ginger. Various local herbs and leaves are also used to spice up the dishes.

The cuisine of Nagaland has largely remained free from influence of other cuisines. As hunting was the main occupation of the people, meat became the prime element of the Naga cuisine. The dishes and the food have remained same over the ages, but the use of spice has been incorporated in the cooking to offer the dishes distinct taste and flavor.

Manipur

Manipur is named as the land of jewels due to its rich tradition involving all the cultural aspects like martial arts, dance, theater, sculpture and the cuisine of the land. The green environment, excellent climate and delectable cuisine make Manipur a wonderful land.

Manipur has very unique individuality in terms of food culture. The most distinct characteristic of Manipuri cuisine is that it is hot and rich in nature. The Manipuri cuisine has a spectrum of delectable dishes that are simple to cook and healthy for consumption. The cuisine is rich not only in taste but also in quantity. The variety of dishes in this cuisine is more than 200 in number.

The staple food of Manipur comprises of rice, fish and leafy vegetables. As rice is the staple diet, rice beer (Yu) is the most important alcoholic beverages of this state. Most Manipuris have a kitchen garden where they grow vegetables and a pond where they cultivate fish. This makes the vegetables healthy and fresh as the vegetables are grown without the use of pesticides. This in

turn gives the dishes a distinct taste. This also makes the cuisine seasonal as the cuisine is dependent on the various vegetables grown seasonally in the kitchen gardens or acquired from the local market. Various aromatic herbs and roots and certain vegetables that are found only in this region are used to prepare the dishes that make this cuisine so unique in nature. Dried fish is eaten by all ethnic groups, except cat. They even eat dogs, locust, all kinds of birds and frog.

A few of such herbs and roots are maroi napakpi, maroi nakuppi, awa phadigom, mayang-ton, toning-khok etc. and some of the vegetables peculiar to the region are yendem (a kind of taro), chawai, hawai mana, koukha (a herb root), loklei, pulei, komprek, etc. Mushrooms of various kinds are also an important part of the Manipuri cuisine. Some varieties are uyen (similar to shittake mushroom), uchi-na (black slimy mushroom), chengum, kanglayen (lichen).

The dishes are typically spicy and locally grown chillies and herbs are used to make the dishes hot and spicy. Iromba is an eclectic combination of fresh vegetables, bamboo shoots, fermented fish called ngari and chillies. Chicken is also relished by the natives.

The cuisine is traditionally served on banana leaves and eaten by sitting on the floor.

Tripura

Tripura is a beautiful state with rich cultural heritage and has managed to preserve its traditions and culture even in the present age of technology and advanced science. The state is home to about 19 tribes among which the Kokborok speaking Tripuri people are the major tribe and the Bengali population forms the ethno-linguistic majority. The cuisine of Tripura is rich in variety and carries a distinct taste.

The food culture of Tripura is primarily non-vegetarian in nature, though a section of the people is Vaishnavite and follows strict vegetarian diet. Meat is a prominent part of this cuisine, which is prepared in the traditional way. Other dishes make use of vegetables as well as fish.

The Tripuri cuisine is known as *Mui Borok* in the traditional language. One of the key elements of the Tripuri cuisine is a dish called Berma. It is a dried and fermented fish prepared without oil and flavored with local spices. This dish has a taste bordering on the sour side.

The rich tradition of Tripura finds reflection in the food culture of the people of the state comprising of the tribal and non-tribal population. The staple food of the non-tribal Bengalis living in the state comprises of rice, fish, chicken, mutton and pork. The non-tribal Bengali population is known to enjoy a large number of fish dishes prepared from the plentiful fish available in the state. Such curries and dishes are generally spicy in nature. One of the most famous fish preparations in the state is of the delectable Hilsa. This dish is prepared in gravy of mustard and tempered with green chilly to impart an aromatic and spicy taste to the dish. The smell and taste of this dish is a favorite among the people of Tripura. A few other popular dishes of this cuisine are Bangui rice and fish stew, delicious bamboo shoots, fermented fish, local herbs and delectable meat roasts.

Mizoram

Mizoram is a state blessed with mesmerizing hills, pleasant valleys, swirling rivers and placid lakes. Mizoram has a distinct food culture that is very different from the other cuisines of India. It shares some of the food characteristics with that of the other north eastern states but retains a flavor and taste that is unique to the state of Mizoram. Traces of Chinese food culture as well as north Indian style of cuisine find its presence in the Mizo food culture.

Non-vegetarian delicacies are at the core of the Mizo cuisine. Vegetables are popular among the local population but non-vegetarian item is a must in the meals of the people. Rice forms the staple food item and is accompanied by various other vegetarian and non-vegetarian dishes. Fish is one of the non-vegetarian items widely enjoyed by the Mizo people. Pork and chicken are other non-vegetarian items liked hugely by the locals. Duck meat occupies a special place in the Mizo cuisine. Bamboo shoots and local herbs are vital ingredients of this.

Famous Dishes of North Indian States:



Singju





Pasala



Ngari



Koat pitha

Khaar

Awandru

Thenga

Punjab 8.3

Punjab is a combination of two words, Punj (five) and Ab (waters). Punjab, the land of the five rivers-Beas, Satluj, Chenab, Ravi and Jhelum, is also called the land of milk and honey and also known as the bread basket of India.

Punjab has imbibed some aspects of its cuisine from external influences. Connoisseurs of the cuisine say that even the gravy component of Punjabi cuisine came from the Mughals. The popularity of tandoor not only in Punjab but throughout the country has been credited only to Punjab. The tandoori cooking flourished here and spread all across.

Punjabi cuisine is not subtle in its flavor and can be described as the cuisine with dominating use of spices to please the taste buds. There are no specific marinades or exotic sauces but it has fullbodied masalas (spices) cooked with liberal amount of desi ghee (clarified butter) always served with a liberal helping of butter or cream.

Few dishes represent Punjabi cuisine as they have become so popular and are in demand everywhere when it comes to Punjabi cuisine. Sarson ka saag and Makki ki roti are two inseparable dishes and most importantly complement each other so well that in no other regional cuisine of India any dish complement with other in such a manner.

Milk and its products are an essential part of everyday cookery; curd and buttermilk are also an essential concomitant with every Punjabi meal. No meal is complete without a serving of lassi (sweet or salted drink made with curd) or fresh curd and white butter which is consumed in large quantities. Butter is also an important cooking medium apart from being consumed raw along with the food.

The wheat is grown in abundance hence the people here are wheat eater. They consume rice very rarely on festive or special occasion. It's never eaten plain or steamed, rice is always eaten with a flavoring of cumin seeds or fried onions or with rajma or kadhi. Rajma with rice or rice with kadhi is eaten or holidays or on festive days. The dals are a speciality of Punjabi cuisine.

The Punjabi cuisine has a great balance between non-vegetarian dishes as well as in vegetarian dishes. The menu can be framed depending upon the preferences of the diners and has varied dishes in both the cases. The level of spices can vary from being minimal to very prevalent and dominating. There are many mouthwatering dishes in Punjabi cuisine. Murg makhani and Paneer makhani are very good example of an extraordinary dish and are relished all over.

One of the major products of this state is wadiyan. The skinned urad dal is ground and fermented overnight and then mixed with grated petha (ash gourd) and coarse ground spices especially whole black-peppercorn, and crushed hot chilies. The mixture is formed into a hollow ball about the 2" diameter. These dumplings are dried in hot sun. Amritsar is the capital of wadi making. Smaller and milder dried dumplings are made of skinless mung beans, and these are called mongodiyan. These wadiyan and mongodiyan are used in curry preparation and consumed accordingly.

Famous Dishes of Punjab:





8.4 Bengal

Bengal has a very vast and ancient culinary history and has been enriched by various influences, invaders and rulers. It is famous world-wide for its vast range of rice dishes and profuse variety of fish delicacies, hence it is also known as the land of Maach (fish) and Bhaat (rice).

With a huge reliance on fish and lentils served with rice as a staple diet, Bengali cuisine is known for its subtle (yet sometimes fiery) flavours, its splendid confectioneries and mouth-watering desserts.

The key culinary influence of the Christian community was the ritual of tea (introduced by the British and now central to Bengal's identity).

One factor which has influence on Bengali cuisine and cannot be ignored is the food habits by Widow. The widows were very repressive and were not given the freedom to consume onion and garlic in their food and also Non-vegetarian items like fish and meat. They used ginger as well in their preparation. Their innovation and skill led to many culinary practices; simple spice combinations, the ability to prepare small quantities (since widows often ate alone) and creative use of the simplest of cooking techniques. The vegetarian food reached their peak of glory only because of the creativity in eating trends and restrictions on widows.

Rice is the staple diet in Bengal. Due to huge agricultural land, the animals for dairy products are easily available especially buffalo. The increase in number of domestic cattle has led to extensive use of milk in preparation of endless number of Bengal's dessert. Every district in Bengal has a special sweet of its own. Langcha and mihidana-sitabhog of Bardhaman , sharbhaja of Krishnanagar , chanabora of Murshidabad and so on are renowned across the country.

Bengal has a uniqueness in the cuisine of all community and almost every one over here consume fish and meat. The consumption of beef is only restricted to Muslim families. The nature and variety of dishes found in Bengali cooking are unique even in India. Fish cookery is one of its better-known features and distinguishes it from the cooking of the landlocked regions.

The proximity to Bay of Bengal and Bengal's countless rivers, ponds and lakes are accountable for various kinds of fish like rohu, hilsa, koi or pabda, magur, bhetki, chitol, bual, puti, amodi, mourala, bhola, phesha, topshe, catfish, bass, shad or mullet and so on. Bengalis prepare fish in

innumerable ways - steamed or braised, or stewed with greens or other vegetables and with sauces that are mustard-based or thickened with poppyseeds. Bengali are so particular about their usage of fish that they use almost every part of the fish in their cuisine. They use every part of fish and the head is preferred most whereas the spare bits of the fish are used in flavouring dals and curries. The salt water fish Ilish (Hilsa) is the most popular fish and can be said as the heart of Fish cookery in Bengal. It is said that the Ilish can be cooked in 108 distinct ways. Ilish fish from the Padma river in Bangladesh is considered to be the best from the connoisseur point of view. The list of the fish is large and has rui (rohu), koi, pabda, katla, shutki, jhinga are in the basket of Bengali cuisine. Depending on the texture, size, fat content and the bones, there are different cooking methods for the fish. It could be fried, cooked in roasted, a simple spicy tomato or ginger based gravy (jhol), or mustard based with green chillies, with posto, with seasonal vegetables, steamed, steamed inside of plantain or butternut squash leaves, cooked with doi (curd/yogurt), with sour sauce, with sweet sauce or even the fish made to taste sweet on one side, and savoury on the other.

Spices used in Bengali cuisine are altogether different from the other parts of India. The use of spices for both fish and vegetable dishes is quite extensive and includes many combinations. Examples are the onion-flavored kalonji (nigella or black onion seeds), radhuni (wild celery seeds), and five-spice or paanch phoron (a mixture of cumin, fennel, fenugreek, kalonji, and black mustard seeds). The unique quality of Bengali cooking probably is the addition of this panch phoron, a combination of whole spices, fried and added at the start or finish of cooking as flavouring special to each dish. Bengalis share their love of whole black mustard seeds with South Indians, but unique to Bengal is the use of freshly ground mustard paste, which is used to make fish curry gravy or in the preparation of steamed fish. Mustard paste called Kasundi is an accompanying dipping sauce popular in Bengal.

As rice is the staple diet, the people here are rice eaters. The fertile land of Bengal produces rice of different varieties and it varies from long grain fragrant rice to small grain rice. Rice is eaten in various forms like well-puffed, beaten, boiled or fried, depending upon the meal. Puffed and beaten rice are used to prepare snacks and the other varieties are used for the main course preparation. Paramanna is rice cooked with milk, which is offered to gods.

Shorsher tel (mustard oil) is the primary cooking medium in Bengali cuisine, whereas other oil like sunflower oil, soybean oil, almond oil and refined vegetable oil are also in use. However, depending on type of food, ghee (clarified butter) is often used, e.g., for making the dough or for frying bread.

Another characteristic of Bengali food is the use of a unique cutting instrument, the boti. (This instrument is also used in Maharashtra, where it is known as vili and in Andhra Pradesh, known as kathi peeta (kathi = knife and peeta = platform and in Uttar Pradesh as Pahsul). It is a long curved blade on a platform held down by foot; both hands are used to hold whatever is being cut and move it against the blade. The method gives excellent control over the cutting process, and

can be used to cut anything from tiny shrimp to large pumpkins. Knives are rare in a traditional Bengali kitchen.

Famous Dishes of Bengal:





Muri



Machher jhol

Chumchum



Bhapa Illish

Rasmalai

Bhapa doi



8.5 Kashmir

The cuisine of Kashmir is one of the oldest regional cuisines of India and has evolved and refined over a period of about hundreds of years. The cuisine of Kashmir has its peculiar quality that differentiates it from the rest of the other regional cuisine arts of India. The cuisine of Kashmir is awesome and pristine as the beauty of Kashmir.

Spices play a very crucial role in imparting taste and aroma to the dishes in Kashmiri cooking. Kashmiri cuisine is quite tempting and is known for its flavour and hot spicy taste.

The traditional Wazwan takes the Kashmiri cuisine to a very different level of hospitality and more or less has become an inseparable identity of Kashmiri cuisine. Wazwan cuisine is a salient element, as the pride of Kashmir culture and identity that evolved in the valley several centuries ago and has retained a distinct personality of its own that is perhaps unrivaled in the world.

Kashmiri cuisine is very peculiar with the richness and redolence of the spices used in it cinnamon, cardamom, cloves, saffron etc.

Mutton, chicken or fish are of prime importance in Kashmiri meal and everyday cooking often combines vegetable and meat in the same dish. Mutton and turnips, chicken and spinach, fish and lotus root are also very popular combinations. Sweets do not play an important role in Kashmiri cuisine. Instead Kahva or green tea is used to wash down a meal. Kahva is served or poured from a large unique metal kettle known as Samovar.

Kashmiri like breads such as 'sheermal' and 'baquerkhani', without which no Kashmiri breakfast is complete. Kashmiris use a variety of breads seldom seen elsewhere. *Tsot* and *tsochvoru* are small round breads, topped with poppy and sesame seeds and traditionally washed down with salt tea.

Locally grown varieties of rice are sweetly fragrant and very light. All the dishes are built around the main course of rice. The delicious saag, is made from thick-leafed green leafy vegetable called 'haak' that grows throughout the year. Lotus root is also an important produce for boat dwelling people and makes a very good substitute for meat.

Fresh vegetables are used in season. Morel mushrooms called as 'gucchi' are harvested and consumed fresh in summer. They are expensive therefore used for specific occasions such as religious and wedding feasts. Their hearty flavour enlivens pilafs and other meatless dishes. Corn bread is an alternative for rice.

Apples, walnut and almonds are available in abundance. Fruits are preserved by canning or as pickles and are also used in as much dish as possible. Apples include sweet and tart variety and are available in different colours like red apples and yellow crab apples. Nadra cherries and plums (alubukhara) are also grown in abundance.

Famous Dishes of Kashmir:



8.6 Awadh (Uttar Pradesh)

The former kingdom of Awadh (Oudh) is now represented by the area in and around Lucknow (Capital of Uttar Pradesh) and has taken the cuisine of this region to the paradigm and to the level of par excellence.

Heavily influenced by Mughlai cuisine, Awadhi cuisine is generally considered the cuisine of the Kings of Lucknow. The cuisine consists of both vegetarian and non-vegetarian dishes but has

many unique dishes that catered to the richer tastes of the North Indian Royal class. The chefs use to receive royal patronage from nawabs and were handsomely rewarded for their skills and service. This drove the chefs to raise their craft to art – they drew their inspiration from poetry, music, season, festival, flora and fauna, and people were unafraid to experiment with new techniques and ingredients. Their painstakingly recipes were jealously guarded secrets, passed on to generations by word of mouth alone.

The Awadhi cuisine being rich in variety the menu often varies in accordance to the seasons and the festivities of the region. The cold and harsh winter months are dealt with rich food such as Paya (which is a dish cooked overnight over a slow fire) and such items are relished with delicious hot naans.

The winter menu is made more special by using meat of birds in the dishes. Heat giving birds, like quail and partridge is preferred in the dishes during the winter season. Fish is also relished during the cold winter months but when the rainy season arrives, fish preparations are generally avoided. Awadh is a region where the fresh fishes from the rivers are preferred. Various dishes are prepared from fish. One of the delicious and well-known fish preparations of Awadh is the fish kebab. Generally, a variety of Indian carp fish is used to prepare this dish and cooked in mustard oil. One of the popular vegetable in Awadh is the green pea. This vegetable is used in a lot of dishes including salan, nimona, keema, pulao or in fried vegetable dishes.

This region has a special liking for pulsos as compare to biryani. There are seven well-known pulaos in Awadh. The nawabs of this region also preferred pulao over biryani. One famous preparation in this region is Yakhani pulao. This preparation includes cuts like nalli, puth, neck, seena, and chops. First of all, the meats are seared with spices and then cooked in stock. After the meat is cooked, the yakhni is strained to prepare the gravy in which the rice and meat would need to be further cooked. Then, the parboiled rice, meat, browned onions, and yakhni gravy are all layered and the pulao is cooked dum for few minutes. on The dairy products have also been used very commonly in foods like milk and yoghurt. In Awadh, great attention has been paid to the various preparations from these, such as *balai*, i.e. clotted cream. Here the succulent portion is removed by warming the milk (in very shallow trays) over a very slow fire.

Famous Dishes of Awadh:









Bhindi-do-pyaza

Gobhi mussallam

Galouti kebab

Dal Sultani









Shammi kebab

Raan

Nargisi Kofta

Lucknowi Biryani

8.7 Uttaranchal or Uttarakhand

Uttarakhand is a hill state, situated in Central Himalaya. It differs from plains in topography and agricultural characteristics and hence it offers a vast scope for cultivation of diverse mix of crops- cereals, millets, pulses, oilseeds, vegetables, etc. The rich natural diversity coupled with the distinct climatic conditions yield edible plants and spices that are unique to the State.

The food commodities of Uttarakhand are renowned for their extremely high nutrient value and taste. Inorder to meet the requirement of food for survival; local communities have identified a large number of plant species from the wild natural stand. Such wild edible plants constitute a large portion of food consumed by local inhabitants in tribal and hilly areas. Local people have wonderful skill to identify a large number of wild edible plant species, their palatability, products and preparation.

Diversification of food recipes is a major speciality of the region. There are many recipes used as substitute of the items, which are meagerly produced in the region. A large number of crops have been introduced in this region by early settlers which have created a huge diversity in crop plants as compared to the plains.

Rice, roti, dal and vegetables are taken as meal during lunch, dinner and breakfast.

Rice and roti has been the staple food items, pulses has been very scarce due to low production.

Apart from the common vegetable in the northern India, there are some vegetable delicacies only cooked in the Hills of Uttarakhand. When some vegetables are produced in abundance, farmers prepare certain dried products for using them during crisis.

Famous Dishes of Uttaranchal:









Roth

Mandua ki roti

Kafuli

Каара



Badeel

Baadi

Aloo ke gutke

Thechwani

8.8 Summary

This unit deals with the unique and salient features of the regional Indian cuisine with respect to the states of India. This unit describes in brief about the cuisine of Kashmir, Punjab, Gujarat, Awadh (Uttar Pradesh), Uttaranchal, Bengal, Rajasthan and North Eastern States of India. It explains about the availability of each state and how it has helped in shaping up the Indian regional cuisine of each respective state. It describes about the eating trends, eating style and their pattern with respect to the culture of each state.

8.9 **Review Questions**

- 1. What are the salient features of Awadhi Cuisine?
- 2. Explain in brief about the culinary features of Bengali cuisine.
- 3. How does the availability of ingredients affect the regional cuisine of India with respect to state?
- 4. Write a brief note on the cuisine of Uttarakhand.
- 5. Explain the salient features of Kashmir in brief.
- 6. How is Gujarati cuisine different from the rest of the cuisine of India? Explain.

8.10 References and Suggestive Readings

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- 2. Larousse Gastronomique Hamlyn Publication
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UNIT 9

Southern & Western States Cuisine

Structure

- 9.1 Introduction
- 9.2 Southern Cuisine
 - 9.2.1 Karnataka Cuisine
 - 9.2.2 Kerala Cuisine
 - 9.2.3 Tamil Cuisine
- 9.3 Western Cuisine
 - 9.3.1 Maharastrian Cuisine
 - 9.3.2 Rajasthan
 - 9.3.3 Gujarat
 - 9.3.4 Goan Region
- 9.4 Summary
- 9.5 Review Questions
- 9.6 References and Suggestive Readings

9.1 Introduction

South Indian cuisine includes the cuisines found in the five southern states of India: Andhra Pradesh, Karnataka, Kerala, Tamil Nadu and Telangana.

The southern part of India is famous for its various spices and also spicy foods. Its long past has witnessed the export of spices to many countries. Even the outsiders, generally the foreign invaders like the Dutch, the French and the English, who kept coming here over generations, are reported to be fond of these spices. Some of the chief varieties of spices produced here include cardamom, pepper, cinnamon, cloves and nutmeg.

The south India is equally famous for the availability of coconut, a wide variety of fishes and root tubers. The south Indian food is mainly rice, which the south Indian people love to have with a combination of Sambhar or curry.

A generous but at the same time a balanced use of spices is done here in most of the vegetarian and non-vegetarian dishes of this region. Similarly in most of the dishes that are prepared here the final tempering remains almost same, witch includes a perfect mixture of oil, mustard seeds, curry leaves and red chilies etc.

Western Cuisine Include states of : Rajasthan, Gujarat, Maharashtra and Goa.

Geographical and cultural influence on the regions cuisine is evident as Rajasthan and Gujarat have hot, dry climates so the relatively smaller variety of vegetables available are preserved as pickles and chutneys. Culturally these states are largely Hindu and vegetarian. Parts of cosmopolitan Maharashtra are coastal and parts arid, and the food varies accordingly. Peanuts and coconut are important ingredients as they are freely available. Goa with its lush green coastline has an abundance of fresh fish and seafood. Local dishes like Vindaloo and Xacuti testify to the fact that it was a Portuguese colony until the 1960s.

9.2 Southern Cuisine

Tamil Nadu is one of the important states of South India. Besides its rich cultural past it reminds us that unique taste of yum cuisines such as Idlis, Dosas, Uttappam, Rassam, Sambhar and Vada etc, which are extremely popular here and throughout the world as well.

Kerala is another significant state of South India. In this state the staple food of localites is fish accompanied with steaming rice of usually large size grains. Here banana trees and jackfruit trees are very common in sight. The people here prepare special snacks with these fruits like banana chips and jackfruit chips, which are equally liked and appreciated by the outsiders who come here.



Andhra Pradesh is important state of South India. You can easily notice a clear Mughal impact on the cuisines of this state. The food mostly prepared here is believed to be quite spicy and hot in nature. Few of the popular dishes of the state are grilled kebabs, kurmas and the delicious Biryani

The cuisines of Andhra are the spiciest in all of India. Generous use of chili powder and tamarind make the dishes tangy and hot. The majority of a diverse variety of dishes is vegetable- or lentil-based.

Regional variations

The three regions of Andhra Pradesh have their own variations. Telangana region shares some of the Central Indian and Vidharba region of Maharashtra. The area has more jowar- and bajrabased rotis in their main staple menu.

The Rayalaseema district shares borders with eastern Karnataka and Tamil Nadu, and its cuisine has similarities to that of those regions.

The more fertile Andhra coastal region has a long coastline along the Bay of Bengal, and its cuisine has a distinctive flavor with various seafood. Hyderabad, the capital of Andhra Pradesh, has its own characteristic cuisine, which is considerably different from other Andhra cuisines. The Nizams patronise the Hyderabadi cuisine, which is very much like the Nawabs of the Avadh and Lucknowi cuisine. The only difference is that the Nizams of Hyderabad prefer their food to be spicier, resulting in the Hyderabadi cuisine, which includes kacche gosht ki biryani, dum ka murgh, baghara baingan, and achaari subzi during the reign of the Nizams.

Popular Andhra dishes

Vegetarian

Tiffins: pesarattu (mung bean pancake), attu, bobbatlu, pulihora or pulihaara (tamarind & lemon rice), upma

Pickles (pachhallu): cut raw mango) pickle, maaghaya, gongura pachadi, pandumirapakayala pachadi, tomato pachadi, allam (ginger) pachadi, dosakaya pachadi, dosavakaya, chintakaya (tamarind)

Curries (kooralu): gutti vankaya, bendakaya fry, dondakaya fry, cabbage pesara pappu, carrot fry

Pappu (lentils) varieties: thotakura (amaranth – pigeon pea stew) pappu, chukkakoora pappu, menthikura pappu, palakura pappu (spinach – pigeon pea dal), dosakaya (yellow cucumber – pigeon pea stew), tomato, beerakaya, sorakaya

Pulusu: palakoora pulusu, sorakaya pulusu, thotakoora pulusu, anapakaya pulusu, gongura pulusu koora

Chaaru: tomato chaaru, miriyala chaaru (pepper), ulava chaaru

Chaaru and curd variations: perugupachadi/majjiga chaaru with potlakaya (snake gourd), sorakaya (bottle gourd)

Snacks: sakinalu, chekkalu, murukulu, jantikalu, chakkilalu

Sweets: pootarekulu, kaaja, ravva laddu, boondi laddu, pesara laddu, sunnundalu, thokkudu laddu, ariselu, nuvvula laddu

Chutney and pickles

Raw pachadi-vankaya pachadi, dosakaya vanakaya pachadi, tomato pachadi, cabbage pachadi, pickles of avakaya (mango), usirikaya (Indian gooseberry), ginger, citroen, gongura, tomato, garlic

Non-vegetarian

Hyderabadi biriyani and various Hyderabadi meat dishes make up part of Hyderabadi cuisine. The rest of Andhra cuisine has a various versions of lamb and chicken, and the coastal region has extensive varieties of seafood. Dishes include kodi iguru (chicken stew), kodi pulusu (chicken gravy), chepa pulusu (fish stew), fish fry and prawn curry.

9.2.1 Karnataka Cuisine

	Lunch from Karnataka served on a plantain leaf.
	North Karnataka meal

Karnataka cuisine is very diverse. Described as the mildest in terms of spice content of the four southern states' cuisines, there is a generous use of jaggery, palm sugar and little use of chili powder. Since the percentage of vegetarians in Karnataka is higher than other southern states, vegetarian food enjoys widespread popularity. Udupi cuisine forms an integral part of Karnataka cuisine.

Karnataka dishes

People from Karnataka are known for their sweet tooth. Mysore pak, obbattu/holige, dharwad pedha, pheni, and chiroti are popular sweets. Other lesser-known sweets include "hungu," kajjaya, coconut mithai, karjikai, rave unde, sajapa, pakada pappu, chigali, a variety of kadubus, tambittu, paramanna, and hayagreeva. Most of these sweets are not milk-based, unlike the popular sweetmaking tradition elsewhere in India, but rather are made using jaggery instead of refined sugar.

Some typical breakfast dishes include masala Dosa, ragi rotti, akki rotti, Vangibath, menthya baath, tamato baath, khara baath, kesari baath, shavige baath, davanagere benne dosa, uppittu, plain and rave idli, mysore masala dosa, kadubu, poori, and avalakki.

Lunch items include (sambar) huli, (rasam) thili, kootu, gojju, a delicacy called bisi bele baath, chitranna, kosambri (salad), pachadi, and mosaru bajji.

Snack items include kodabale, chakkali, nippatu, maddur vade, aamb vade, golli bajji, and mangalore bun.

9.2.2 Kerala Cuisine



Kerala cuisine is very diverse, a diversity is best classified on the basis of the various communities. The Syrian Christian dishes and Malabari Muslim dishes are famous. Since Kerala's main export is coconuts, almost all of the dishes, irrespective of the variety in the cuisines of the different communities, have coconuts associated with them, either in the form of shavings or oil extracted from the nut. Seafood is also very popular in the coastal regions and eaten almost every day.

Popular Kerala dishes:

Vegetarian: olan, paalpradaman, nendarangai chips, aviyal, pulissery, erucherri, sambar, rasam, kalan, upperis, pachady, and kichadi

Non-vegetarian: shrimp coconut curry, fish curry (various versions depending on the region), fish fry, chicken fry with shredded coconuts, fish pickle, podimeen fry, meen thoran (fish with coconut), karimeen (pearl spot fish) pollichathu, shrimp masala, chicken stew, mutton stew, duck curry, malabari fish curry, kakka (shells) thoran, kalllumekka, crabs, malabar biriyani, thalassery biriyani, pearl spot fish, jewel fish, mussels, squid, kappa boiled, kappa (tapioca) vevichathu with non-vegetarian curries

Malabar biriyani is a rice cuisine using khyma rice instead of basmati rice. The main variants are thalassery biriyani and kozhikode biryani.

Snacks: upperi, payasam, banan fry (ethaykkappam or pazham pori), ullivada, kozhukkatta, avalosunda, unniyappam, neeyyappam, unnaykka, thira, churuttu, boli, modhakam, paal vazhaykka, cutlets, halwas, cakes, vattayappam, kinnathappam, and irattymadhuram

Breakfast: puttu (with banana or kadala curry, egg curry, or beef fry), Appam (velayappam, palappam) with curry, vegetable stew, fish molee, chicken or mutton stew, beef curry, duck

roast, pork masala, and idiyappam, pidi with mutton curry or chicken curry, porotta with chicken curry or mutton curry, idli, dosai with chutney, kanji with dry beans, pickle, pappad made with coconut

Typical Indian masala dosa (Kerala style), is a combination of shredded, cooked, and fried vegetables with Indian sauce and several spices as the basic stuffing, enveloped by a thick brown dosa made out of a dal and rice batter. To embellish this unique preparation, it is served with hot sambhar and coconut chutney.

9.2.3 Tamil food

Veg Meals in Tamil Nadu traditionally served in banana leaf
Idli-Sambar,a typical Tamil breakfast dish.
Dosa with chutney and sambar traditionally served in banana leaf
Medhu Vadai is a popular snack in Tamil Nadu served with chutneys.



A typical Tamil meal consists of many spicy and non-spicy dishes. Many of these dishes are generally mixed and eaten with steamed rice, which is the staple food of the region. Except for Brahmins and a couple of non-Brahmin castes, most Tamilians eat non-vegetarian food. However, on a typical day, a Tamil family will eat mostly vegetarian food, and the intake of meat is lower than in most parts of the world.

Tamil cuisine groups dishes under five slightly overlapping categories.

Gravy dishes to be mixed in rice

First are the dishes that necessarily are mixed with rice. The sub-categories under this head are: kuzhambu, sambhar, paruppu, rasam,thayir, and kadaiyals. There is a great variety of dishes under each sub-category. For example, under "kuzhambu", common dishes include kaara

kuzhambu, puzhi kuzhambu, poondu kuzhambu, vaththal kuzhambu, payaRRuk kuzhambu, mOr kuzhambu.

Accompaniments

Foods in the second category are the side dishes that accompany such mixtures, including kootu, kari, poriyal, pickles, and Papadum.

Standalone snacks

In the third category are the short snacks and their accompaniments, including vadai, bonda, bajji, soups, various chutneys, and thayir Pachadi.

Dessert

The fourth category encompasses the rich, sweet dishes that serve as desserts, including payasam, kheer, Kesari bhath and a plethora of other Indian sweets.

Fast foods, or light meals

The fifth category includes "tiffin," or light meals, which includes various types of idlis,dosai, poori, pongal, uppma, idiyappam, aappam, adai, parotta, and paniyaram. Preparations from the fifth category are served for breakfast and dinner, but usually not as a midday meal.

Tamil cuisine offers primarily light breakfast, lighter dinner, a heavy midday meal and evening snacks, often served with tea or coffee. The rasam is mixed with rice, usually eaten accompanied by crisps. The last of the courses will invariably be rice with curd or yogurt, usually taken along withpickles.

Throughout the meal, the side dishes are served and eaten with the courses, depending upon one's taste or choice. Side dishes are constantly replenished during any meal. Desserts are served as the last course. After the meal, guests retire to the living room and conclude with bananas and freshly made paan, consisting of betel leaves, betel nuts and lime. Paan is considered a digestive aid.

Tamil non-vegetarian meals are similar, except that the first and second courses are usually replaced by various biryanis and non-vegetarian gravies.

In either case, a typical meal (lunch or dinner) will be served on a banana leaf. Meals are often accompanied by various pickles and appalams.

Food is generally classified into six tastes–sweet, sour, salt, bitter, pungent and astringent. Traditional Tamil cuisine recommends that one includes all of these six tastes in each main meal eaten. Each taste has a balancing ability and including some of each provides complete nutrition, minimises cravings and balances the appetite and digestion.

• Sweet: milk, butter, sweet cream, wheat, ghee (clarified butter), rice, and honey

- Sour: limes and lemons, citrus fruits, yogurt, mango, and tamarind
- Salty: salt or pickles
- Bitter: bitter gourd, greens of many kinds, turmeric, and fenugreek
- Pungent: chili peppers, ginger, black pepper, clove, and mustard
- Astringent: beans, lentils, turmeric, vegetables like cauliflower and cabbage, and cilantro

Chettinad cuisine

Chettinad cuisine is famous for its use of a variety of spices in preparing mainly non-vegetarian food. The dishes are hot and pungent with fresh ground masalas, and topped with a boiled egg that is usually considered an essential part of a meal. They also use a variety of sun-dried meats and salted vegetables, reflecting the dry environment of the region. The meat is restricted to fish, prawn, lobster, crab, chicken and mutton. Chettiars do not eat beef and pork.

Most of the dishes are eaten with rice and rice-based accompaniments such as dosais, appams, idiyappams, adais and idlis. The Chettinad people, through their mercantile contacts with Burma, learnt to prepare a type of rice pudding made with sticky red rice.

Chettinad cuisine offers a variety of vegetarian and non-vegetarian dishes. Some of the popular vegetarian dishes include idiyappam, paniyaram, vellai paniyaram, karuppatti paniyaram, paal paniyaram, kuzhi paniyaram, kozhakattai, masala paniyaram, adikoozh, kandharappam, seeyam, masala seeyam, kavuni arisi and athirasam.

9.3 Western Cuisine

This region probably has the most diverse styles of food in India. Rajasthani food is spicy and largely vegetarian but includes many delicious meat dishes like Laal Maas (red meat curry) while Gujarat's cuisine is known for its slight sweet touch (at least a pinch of sugar is added to most dishes!) and is traditionally entirely vegetarian.

Thaali (a large plate) is the Gujarati style of eating and a meal can consist of as many as 10 different vegetable dishes, rice, chapati (Indian bread) and sweets! The Gujaratis love a snack and cook a huge variety of them. These are collectively known as Farsan.

In Maharashtra, coastal areas are famous for Malvani cuisine (fresh coconut-based hot and sour curries with fish and seafood) while the interiors have the more frugal, Vidharba cuisine which uses a lot of dry coconut. Goan food is rich, piquant and strongly flavored by coconut, red chillies and vinegar.

Staple foods: In Gujarat and Rajasthan corn, lentils and gram flour, dry red chillies, buttermilk, yoghurt, sugar and nuts; in Maharashtra, fish, rice, coconut and peanuts and in Goa fish, pork and rice.

Cooking oils commonly used: Vegetable oils like sunflower, canola and peanut oil and ghee.

Important spices and ingredients: Dry red chillies, sugar, sesame seeds, coconut, nuts, vinegar, fish, pork....

Popular dishes: Pork Vindaloo, Chicken Xacuti, Fish Curry, Bhelpuri, Thepla, Daal-Baati-Choorma, Laal Maas, Ghewar....

9.3.1 Maharastrian Cuisine

Maharashtrian (or **Marathi**) **cuisine** is cuisine of the Marathi people from the state of Maharashtra in India. Maharashtrian cuisine covers a range from being mild to very spicy dishes. Wheat, rice, jowar, bajri, vegetables, lentils and fruit form Staples of Maharashtrian diet. Traditionally, Maharashtrians have considered their food to be more austere than that of other regions in India. Also, because of economic conditions and culture, meat has traditionally been used quite sparsely or only by the well off until recently. Maharashtra and particularly, the metropolitan cities like Mumbai and Pune tend to be cosmopolitan and this has influenced the food habits of the urban population. For example, the Udupi dishes like idli and Dosa are quite popular and also Chinese dishes. Nevertheless, distinctly Maharashtrian dishes such as puran poli , ukdiche Modak, and 'aluchi bhaji remain popular.

The staple dishes of Maharashtrian cuisine are based on flat bread and rice. The flat breads can be wheat based such as the traditional trigonal Ghadichi Poli^[1] or the roundchapati more common in urban areas. Bhakri - bread made from millets like jowar and bajra, form part of daily food in rural areas.^[2] As many areas of Maharashtra are drought prone, traditionally the staple food of the rural poor has been as simple as Bajri Bhakri accompanied by just a raw onion , a dry chutney or a Gram flour preparation called Zunka or Pithale. Maharashtrian meals (mainly lunch and dinner) are served on a plate called thali. Each food item served on the thali has a specific place. The bhaaji is served in the plate on the right hand side while the chutney, koshimbir are served from left going up the periphery of the circular plate. The papad , bhaaji are served below the koshimbir with the rice and poli served at the bottom of the circle closed to the diner's hand. The puran is served at the top in the inner concentric circle. The amti, rassa is served in separate bowls placed on right hand side of the diner

"Amti"	Sweet and Sour Lentil Curry, made with Tamarind and
	Jaggery
Batatyachi Bhaji	Potato preparations
Vangyache bharit	Baingan Bharta
Dalimbya	Beans
Farasbichi Bhaji	French beans
Palkachi Takatli Bhaji	Spinach cooked in buttermilk

Vegetable and	lentil	preparations
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Kelphulachi Bhaji	Banana/plantain bloom
Fansachi Bhaji	Jack fruit preparation

Meat preparations

Varhadi rassa	A gravy from Varhad region mainly used in preparing meat dishes. The gravy is commonly used in making chicken curries.
Taambda rassa [[]	Mutton Kolhapuri
Chicken Maratha	Chicken Preparation
Mutton Maratha	Mutton Preparation

Soup/Curry/Lentils

Kadhi	Served with Khichadi, boiled rice or as part of the Thali
Solkadhi	prepared from coconut milk and Kokam.
Tomato saar	Maharashtrian spicy tomato soup
Kokam saar	Soup prepared from dried fruit of Kokam (Garcinia indica)
Varan	plain non-spicy or lightly spiced daal lentil with split Pigeon pea (Toor dal)
Aamti	Thin Spicy soup with toor dal base or Mung dal. Served in the main course or the Thali.
Katachi Aamti	Sweet, hot and sour soup prepared from Chana or Chickpea dal

Pickles, Condiments, Jams & Jellies

Ambyache lonche	mango pickle
Limbache lonche	lemon pickle
Awlyache lonche	amla pickle
Mohoriche lonche	mustard pickle
Ambe-haladiche lonache	fresh turmeric pickle

Mirachiche lonache	Chilly Pickle
Muramba	A kind of preserve, made from jaggery and seasonal fruits
Sakhramba	A kind of preserve, made from sugar and seasonal fruits

Sweets/desserts

Puran Poli:	It is one of the most popular sweet item in the Maharashtrian cuisine. It is made from jaggery (molasses or gur), yellow gram (chana) dal, pain flour, cardamom powder and ghee (clarified butter).
Gulachi Poli	Made specially on Makar Sankranti in typical Brahmin households, the Gulachi poli is a heavy meal similar to the Puran Poli. It is made with a stuffing of soft/shredded Jaggery mixed with toasted, ground Til (white sesame seeds)and some gram flour which has been toasted to golden in plenty of pure Ghee.
Modak	a Maharashtrian sweet typically steamed
Gulab Jaam	balls made of dense milk (Mava/Khava) and bleached wheat flour fried in ghee (clarified butter) and then dipped in sugar syrup.
Basundi	Sweetened dense milk dessert.
Shrikhand	Sweetened yogurt flavoured with saffron, cardamom and charoli nuts.

9.3.2 Rajasthan

Each region in India has its own traditional dishes and specialties and Rajasthan is no exception to it.

The cuisine and culinary art of the all princely state of Rajasthan is judged as the most majestic and royal by the connoisseurs of food.

It is indeed a matter, worthy of appreciation that even when surviving in the rough terrains of Rajasthan was difficult, people here have devised recipes and a whole lot of them, competed and emulated by all in the country. Ingredients in these recipes have been carefully selected, more

out of hard geographical compulsion than out of fetish for the taste. The ingredients chosen here were by compulsion not by choice.

Rajasthani cooking was influenced by the war-like lifestyle of its inhabitants and the availability of ingredients in this region. The availability of all types of food was a rarity here and the preservation of the food was the main criteria because of the desert conditions and war situations of Rajasthan. As nothing could be grown in the barren lands facing the hot and stormy sanddunes, challenging tasks for the cooks was to think of recipes which required minimum use of water, and could be stored for long period of time without requiring re-heating and did not use great quantities of vegetables and the cooks came out with flying colours to achieve this objective with great sense of accomplishment.

The cuisine of Rajasthan is primarily vegetarian and offers a fabulous variety of mouthwatering dishes. The spice content is quite high in comparison to other Indian cuisines, but the food is absolutely scrumptious. Rajasthanis use ghee for cooking most of the dishes. Rajasthani food is well known for its spicy curries and delicious sweets.

Rajasthani cooking here has its own unique flavor and the simplest; the most basic of ingredients go into the preparation of most of the dishes in Rajasthan. The passion of the Maharajas of Rajasthan for shikar (hunting) has been largely responsible for shaping the culinary art in Rajasthan. In the world of good eating, game cooking is easily the most respected art form in Rajasthan, largely because the skills required to clean, cut and cook game are not easily acquired.

The personal recipes of the royal khansama still rotate around their generations and are the highlights of regal gatherings of Rajasthan. Each state of Rajasthan had their own style of the recipes which is continued in the Rajput households. It was mainly the men folks of the family that prepared the non-vegetarian. Some of the Maharajas apart from being great hunters relished the passion of cooking the shikars themselves for their chosen guests and the trend continues among the generation of Rajasthan.

In the desert belt of Jaisalmer, Barmer and Bikaner of Rajasthan, cooks use a minimum of water and prefer, instead, to use more milk, buttermilk and clarified butter. A distinct feature of the Maheshwari cooking is the use of mango powder, a suitable substitute for tomatoes, scarce in the desert, and asafoetida, to enhance the taste in the absence of garlic and onions. Dried lentils, beans from indigenous plants like sangri, ker, etc are liberally used. Gram flour is a major ingredient here and is used to make some of the delicacies like khata, gatte ki sabzi, pakodi etc. Powdered lentils are used for mangodi, papad etc.

Depending upon the availability of ingredients, dishes are prepared accordingly. Gram flour is a very versatile ingredient and one of the best examples of this statement. Gram flour is a major ingredient produce here and used to make some of the delicacies like khatta, gatte ki subzi, kadhi, pakodi, powdered lentil are used for mangodi and papad. They are used in preparation of dessert as well like besan ki chakki or mohanthal.
The unique creation of the Maharaja of Salwar is the Junglee maans. Junglee maans was a great favourite among the Maharajas and due to paucity of exotic ingredients in the camp kitchen, the game brought in from the hunt was simply cooked in pure ghee, salt and plenty of red chillies. **Famous Dishes of Rajasthan:**



Lal maans



Gulab jamun

ki subzi



Ghewar



Gatte ki subzi



9.3.3 Gujarat

Gujarati Cuisine offers a lot of variety and the Gujaratis love to eat. The Gujarati Thali consists of all the four components, (Dal, bhaat, rotli and shaak) i.e. cereal, pulses, vegetables and ricewith supplements like pickle, chutney, papad, buttermilk and salad and therefore it makes a balance diet. There is wide use of ginger, garlic and green chillies, more use of jaggery instead of sugar and therefore with the right kind of blend of Masalas with vegetables and dals the food is easily digestible. Farsan is a collective term used for a type of snacks in Gujarati cuisine. They are fried items which are then dried and can be stored, others are fresh or steamed.

The influences on Gujarati cuisine, that has made quite a place for itself in the internationally famous Indian cuisine list, can be traced to two prominent movements in history. First is the influence of Jainism and second, that of Vaishnavism. The Jain influence came in even earlier than 6th century BC when the teachings of Mahavira had considerable influence on the common people as well as the royalty.

The four regions are North and South Gujarat, Kutch and Kathiawad.

North Gujarat

This region is popular for its traditional Gujarati thali consisting of rice, dal, curry, vegetables, sprouted beans, farsan, pickles, chutney and raita. Food is usually non spicy and oil is used sparingly. Farsans are of various varieties such as Pathara, Khaman Dhokla, and Khandvi.

Kathiawad

It is surprising to know that Saurashtra with its vast stretches of dry earth has sugarcane, wheat, millet, peanuts, and sesame native to this region. Hence pulses dominate Kathiawari food and sweetmeats made of gur (jaggery). This region has a delicious variety of pickles. Kathiwari food is notably dry due to geographical location, and lack of water resources. Hence pulses (gram flour) dominate Kathiawari food and sweetmeats made of gur (jaggery).

Kathiawari favourites include debras made with wheat flour mixed with spinach, green chillies, a dollop of yogurt and a pinch of salt and sugar, these are eaten with Chhundo (a hot and sweet shredded mango pickle).

Kutch

Kutch (also spelled as Kachchh) cuisine is relatively simple and vegetarian in majority. In the villages of Kutch, staple foods include bajra and milk; bajara na rotla with curd and butter milk is very common food for all the Gujarati people. They also extensively drink buttermilk during lunch. Milk is considered to be sacred food and offering it to somebody is considered a gesture of friendship and welcoming. Settlement of dispute invariably follows offering milk to each other as a concluding remark.

Tea is the most popular drink in this region and is enjoyed irrespective of sex, caste, religion or social status. Offering black tea to guests is considered to be a bad gesture. Tea without milk is offered when people are visiting host to mourn death of relatives.

Dabeli is a spicy snack made by mixing boiled potatoes with a dabeli masala, and putting the mixture between Ladi-Pav (burger bun) and served with chutneys made from tamarind, date, garlic, red chilies, etc. and garnished with pomegranate and roasted peanuts.

South Gujarat

In comparison to the dry region of Saurashtra, Southern Gujarat is blessed with plenty of rainfall and hence green vegetables and plenty of fruit therefore dominate in cuisine. There are no elaborate preparations made, no expensive ingredients used and yet the food in its utter simplicity, tastes exotically different.

Popular items include a delicious vegetable concoction called Undhyoo and Paunk, a tangy delicacy.

Surat is also famous for its bakery items like the nankhatais, gharis and the saglubaglu mithai, which are easily available in the city's bakeries and confectionery shops.

The wide variety of taste in Gujarat ranges from extreme sweet items like peda and jalebi to extreme spicy taste like pickles and chutneys. Many Gujarati dishes are distinctively sweet, salty, and spicy at the same time.

A Gujarati thali cannot be complete without staples like Garlic chutney, raw onions, chilli pickleor fried green chilies, Chaas (Butter milk), papad, and ghee with jaggery.

Famous Dishes of Gujarat:



9.3.4 GOAN REGION

Goan cuisine consists of regional foods popular in Goa, located along India's west coast along the Arabian Sea. Chicken, lamb, seafood, coconut milk, rice, and local spices are some of the main ingredients in Goan cuisine. The area is located in a tropical climate, which means that spices and flavors are intense. Use of Kokum is another distinct feature. Goan food is considered incomplete without fish. It is similar to Malvani or Konkani cuisine.

The cuisine of Goa is influenced by its Hindu origins, four hundred years of Portuguese colonialism, and modern techniques. The state is frequently visited by tourists for its beaches and historic sites, so its food has an international aspect.

The cuisine seafood-based; foods are is mostly the staple rice and fish. Kingfish (Vison or Visvan) is the delicacy. most common Others the shellfish are crabs, prawns, tiger include pomfret, shark, tuna, and mackerel. Among prawns, lobster, squid, and mussels. The food of Goan Christians is influenced by the Portuguese.

The Portuguese brought potatoes, tomatoes, pineapples, guavas, and cashews from Brazil to Goa. Of these tomatoes and potatoes were not accepted by the Hindus until the late 20th century. The most important part of Goan spices, the chili, was introduced to Goan cuisine by the Portuguese and became immensely popular. None of these above mentioned ingredients were used in Goan cuisine before the advent of the Portuguese

Popular	Dishes
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Humann	fish curry and rice
Fried fish	
Dhabdhabit	Dry spicy preparation of fish, eaten as a side dish
Fish Udid Methi or Uddamethi	Type of curry consisting of fenugreek and mackerel;
Kismur	A type of side dish normally consisting of dried fish (mostly mackerel or shrimp), onions, and coconut.
Solachi kadi	a spicy coconut and kokum curry
	Pomfret fried fish
	Crab
Ambot tik	A spicy and sour curry prepared with fish.
Sorpotel –	A very spicy pork dish; it is eaten with sannas or pão bread
Xacuti	Curry made with roasted grated coconut with pieces of chicken or lamb
Balchão	A curry made with prawns/shrimp.

Vindaloo		A spicy	curry	where	the	name	is	derived	from
	1	the Portug	uese ter	m for a g	garlic	and wir	ne (v	inho e alh	no)
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9.4 Summary

This unit deals with the unique and salient features of the regional Indian cuisine with respect to the southern and Wesern states of India. This unit describes in brief about the cuisine of Karnataka, Tamil Nadu, Kerala, Maharastra, Rajasthan, Gujarat and Goan cusine. It explains about the availability of each state and how it has helped in shaping up the Indian regional cuisine of each respective state. It describes about the eating trends, eating style and their pattern with respect to the culture of each state.

9.6 **Review Questions**

- 1. What are the salient features of Maharastran Cuisine?
- 2. Explain in brief about the culinary features of South Indian cuisine.
- 3. How does the availability of ingredients affect the regional cuisine of India with respect to state?
- 4. Write a brief note on the cuisine of Rajasthan.
- 5. Explain the salient features of Kerala in brief.
- 6. How is Gujarati cuisine different from the rest of the cuisine of India? Explain.

9.6 References and Suggestive Readings

- 1. Food Production Operations Parvinder Bali (Oxford Publication)
- 2. Larousse Gastronomique Hamlyn Publication
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Unit 10

COMMUNITIES

Structure

- 10.0 Objectives
- 10.1 Introduction
- 10.2 Parsee,
- 10.3 Chettinad,
- 10.4 Hyderabadi,
- 10.5 Lucknowi,
- 10.6 Avadhi,
- 10.7 Malabari,
- 10.8 Christian
- 10.9 Bohri
- 10.10 Question
- 10.11 reference

10.0 Objectives

At the end of the unit learner will be able to---

- Understand the meaning of cuisine
- Learn the importance of cuisine in food
- Understand the importance of proper knowledge about religions and cuisine.
- Understand the difference of every cuisine and communities.

10.1 Introduction

A community is a social unit of any size that shares common values. Although embodied or faceto-face communities are usually small, larger or more extended communities such as a national community, international community and virtual community are also studied.

In human communities, intent, belief, resources, preferences, needs, risks, and a number of other conditions may be present and common, affecting the identity of the participants and their degree of cohesiveness.

Since the advent of the Internet, the concept of community has less geographical limitation, as people can now gather virtually in an online community and share common interests regardless of physical location. Prior to the internet, virtual communities (like social or academic organizations) were far more limited by the constraints of available communication and transportation technologies.

The word "community" is derived from the Old French comunete which is derived from the Latin communitas (from Latin communis, things held in common), a broad term for fellowship or organized society. One broad definition which incorporates all the different forms of community is

" a group or network of persons who are connected (objectively) to each other by relatively durable social relations that extend beyond immediate genealogical ties, and who mutually define that relationship (subjectively) as important to their social identity and social practice.

Cuisine from French cuisine, "cooking; culinary art; kitchen"; ultimately from Latin coquere, "to cook") is a characteristic style of cooking practices and traditions, often associated with a specific culture. Cuisines are often named after the geographic areas or regions from which they originate. A cuisine is primarily influenced by the ingredients that are available locally or through trade. Religious food laws, such as Islamic dietary laws and Jewish dietary laws, can also exercise a strong influence on cuisine. Regional food preparation traditions, customs and ingredients often combine to create dishes unique to a particular region.

Cuisine can be stated as the foods and methods of food preparation traditional to a region or population. The major factors shaping a cuisine are climate, which in large measure determines the native raw materials that are available, economic conditions, which affect trade and can affect food distribution, imports and exports, and religiousness or sumptuary laws, under which certain foods are required or proscribed.

Climate also affects the supply of fuel for cooking; a common Chinese food preparation method was cutting food into small pieces to cook foods quickly and conserve scarce firewood and charcoal. Foods preserved for winter consumption by smoking, curing, and pickling have remained significant in world cuisines for their altered gustatory properties even when these preserving techniques are no longer strictly necessary to the maintenance of an adequate food supply.

New cuisines continue to evolve in contemporary times. An example is fusion cuisine which combines elements of various culinary traditions while not being categorized per any one cuisine style, and generally refers to the innovations in many contemporary restaurant cuisines since the 1970s.

India is known for its love for food and spices. Indian cuisine varies from region to region, reflecting the local produce, cultural diversity, and varied demographics of the country.

Generally, Indian cuisine can be split into five categories - northern, southern, eastern, western, and north-eastern. The diversity of Indian cuisine is characterised by differing use of many spices and herbs, a wide assortment of recipes and cooking techniques. Though a significant portion of Indian food is vegetarian, many traditional Indian dishes also include chicken, goat, beef, buffalo, lamb, fish, and other meats. Fish-based cuisines are common in eastern states of India, particularly West Bengal

Despite this diversity, some unifying threads emerge. Varied uses of spices are an integral part of certain food preparations, and are used to enhance the flavour of a dish and create unique flavours and aromas. Cuisine across India has also been influenced by various cultural groups that entered India throughout history, such as the Persians, Mughals, and European colonists.

Indian cuisine is one of the most popular cuisines across the globe. In most Indian restaurants outside India, the menu does not do justice to the enormous variety of Indian cuisine available - the most common cuisine served on the menu would be Punjabi cuisine (chicken tikka masala is a very popular dish in the United Kingdom). There do exist some restaurants serving cuisines from other regions of India, although these are few and far between. Historically, Indian spices and herbs were one of the most sought after trade commodities. The spice trade between India and Europe led to the rise and dominance of Arab traders to such an extent that European explorers, such as Vasco da Gama and Christopher Columbus, set out to find new trade routes with India leading to the Age of Discovery.[The popularity of curry, which originated in India, across Asia has often led to the dish being labeled as the "pan-Asian" dish.

Regional Indian cuisine continues to evolve. A fusion of East Asian and Western cooking methods with traditional cuisines, along with regional adaptations of fast food are prominent in major Indian cities.

Global cuisines is a cuisine that is practiced around the world, and can be categorized by various regions according to the common use of major foodstuffs, including grains, produce and cooking fats. Regional cuisines may vary based upon food availability and trade, cooking traditions and practices, and cultural differences. For example, in Central and South America, corn (maize), both fresh and dried, is a staple food. In northern Europe, wheat, rye, and fats of animal origin predominate, while in southern Europe olive oil is ubiquitous and rice. Is more prevalent. In Italy the cuisine of the north, featuring butter and rice, stands in contrast to that of the south, with its wheat pasta and olive oil. China likewise can be divided into rice regions and noodle & bread regions. Throughout the Middle East and Mediterranean there is a common thread marking the use of lamb, olive oil, lemons, peppers, and rice. The vegetarianism practiced in much of India has made pulses (crops harvested solely for the dry seed) such as chickpeas and lentils as significant as wheat or rice. From India to Indonesia the use of spices is characteristic; coconuts and seafood are used throughout the region both as foodstuffs and as seasonings.

Food is an integral part of every human culture. Chang notes that the importance of food in understanding human culture lies in its infinite variability - a variability that is not essential for

species survival. For survival needs, people everywhere could eat the same and some simple food. But human cultures, over the ages, experiment, innovate and develop sophisticated cuisines. Cuisines become more than a source of nutrients, they reflect human knowledge, culture, art and expression of love.

Indian food is as diverse as India. Indian cuisines use numerous ingredients, deploy a wide range of food preparation styles, cooking techniques and culinary presentation. From salads to sauces, from vegetarian to meat, from spices to sensuous, from breads to desserts, Indian cuisine is invariably complex. Harold McGee, a favourite of many Michelin-starred chefs, writes "for sheer inventiveness with milk itself as the primary ingredient, no country on earth can match India."

"I travel to India at least three to four times a year. It's always inspirational. There is so much to learn from India because each and every state is a country by itself and each has its own cuisine. There are lots of things to learn about the different cuisines - it just amazes me. I keep my mind open and like to explore different places and pick up different influences as I go along. I don't actually think that there is a single state in India that I haven't visited. ... Indian food is a cosmopolitan cuisine that has so many ingredients. I don't think any cuisine in the world has got so many influences the way that Indian food has. It is a very rich cuisine and is very varied. Every region in the world has their own sense of how Indian food should be perceived. "

- Atul Kochhar, The first Indian to receive two Michelin stars

"... it takes me back to the first Christmas I can remember, when the grandmother I hadn't yet met, who was Indian and lived in England, sent me a box. For me it still carries the taste of strangeness and confusion and wonder."

- Harold McGee, author of On Food and Cooking

Specialty cuisine for festivals and special occasions for these communities

10.2 Parsee,

he basic feature of a Parsi lunch is rice, eaten with lentils or a curry. Curry is made with coconut and ras without, with curry usually being thicker than ras. Dinner would be a meat dish, often accompanied by potatoes or other vegetable curry. Kachumbar (a sharp onion-cucumber salad) accompanies most meals.

Popular Parsi dishes include:

Chicken farcha (fried chicken)

Patra ni machhi (steamed fish wrapped in banana leaf)

Dhansak (lamb, mutton, goat or chicken and/or vegetables in lentil and/or toor daal gravy)

Sali murghi (spicy chicken with fine fried matchstick potatoes)

Kolmi no patio (shrimp in spicy tomato curry)

Khichri (rice with toor daal and/or moong daal)

Saas ni machhi (yellow rice with pomfret fish fillets in white sauce)

Jardaloo sali boti (boneless mutton in an onion and tomato sauce with apricots and fried matchstick potatoes)

Tamota ni russ chaval (mutton cutlets with white rice and tomato sauce)

Also popular among Parsis, but less so elsewhere, are the typical Parsi eeda (egg) dishes, which include akuri (scrambled eggs with spices) and thepora ("Parsi" omelette). Also, vegetables like okra, tomato, potato and others are often cooked with eggs on top.

Traditional breakfasts during the 1930s in Mumbai or in many South Gujarat villages consisted of khurchan (offal meats cooked with potatoes in a spicy gravy), and some variant of the ubiquitous deep-fried, fried or half-fried eggs. In agrarian communities this would be washed down by copious quantities of coconut toddy, often straight off the tree.

Although in the not-so-distant past, vegetables were considered a 'poor peoples food', there is a presently a trend towards light eating, no red-meat and even vegetarianism.

10.3 Chettinad,

Chettinad cuisine is the cuisine of the Chettinad region of Tamil Nadu state in South India. The Chettiar community, who are a majority in this region, are a very successful trading community. Chettinad cuisine is one of the spiciest and the most aromatic in India.

Chettinad cuisine is famous for its use of a variety of spices used in preparing mainly nonvegetarian food. The dishes are hot and pungent with fresh ground masalas, and topped with a boiled egg that is usually considered essential part of a meal. They also use a variety of sun dried meats and salted vegetables, reflecting the dry environment of the region. The meat is restricted to fish, prawn, lobster, crab, chicken and lamb. Chettiars do not eat beef and pork.

Most of the dishes are eaten with rice and rice based accompaniments such as dosais, appams, idiyappams, adais and idlis. The Chettinad people through their mercantile contacts with Burma, learnt to prepare a type of rice pudding made with sticky red rice.

Chettinad cuisine offers a variety of vegetarian and non-vegetarian dishes. Some of the popular vegetarian dishes include idiyappam, paniyaram, vellai paniyaram, karuppatti paniyaram, paal paniyaram, kuzhi paniyaram, kozhakattai, masala

paniyaram, adikoozh, kandharappam, seeyam, masala seeyam, kavuni arisi & athirasam

10.4 Hyderabadi,

Hyderabadi cuisine (native:Hyderabadi Ghizaayat) also known as Deccani cuisine of India, was developed after the foundation of Qutb shahidynasty by Sultan Quli, promoting the native cuisine along with their own. Hyderabadi cuisine had become a princely legacy of the Nizams of Hyderabad State. It is an amalgamation of Mughlai, Turkish and Arabic along with

the influence of the native Telugu and Marathwada cuisines. Hyderabadi cuisine comprises a broad repertoire of rice, wheat and meat dishes and the skilled use of various spices, herbs and natural edibles

Hyderabadi cuisine could be found in the kitchens of the former Hyderabad State that includes Telangana, Marathwada region (now inMaharashtra), and Hyderabad Karanataka region (now in Karnataka). The cuisine also contains city-specific specialities like Hyderabad(Hyderabadi biryani) and Aurangabad (Naan Qalia), Gulbarga (Tahari), and Bidar(Kalyani Biryani).

The cuisine emphasises the use of ingredients that are carefully chosen and cooked to the right degree and time. Utmost attention is given to picking the right kind of spices, meat, and rice. Therefore, an addition of a certain herb, spice, condiment, or a combination of these adds a distinct taste and aroma. The key flavours are of coconut, tamarind, peanuts and sesame seeds which are extensively used in many dishes. The key difference from the North Indian cuisine is the use of dry coconut and tamarind in its cuisine.

Traditional utensils made of copper, brass, and earthen pots are used for cooking. All types of cooking involve the direct use of fire. There is a saying in Hyderabad, cooking patiently (ithmenaan se) is the key; slow-cooking is the hallmark of Hyderabadi cuisine. The Slow-cooking method has its influence from the Dum Pukht method used in Awadhi cuisine.

Hyderabadi Cuisine has different recipes for different events, and hence is categorized accordingly, like banquet food, for weddings and parties, festival foods and travel foods. The category to which the recipe belongs itself speaks of different things like the time required to prepare the food, the shelf life of the prepared item, etc.

10.5 Lucknowi,

The cuisine of Lucknow has its own distinct individuality and identity. The traditional food of Lucknow was highly patronized by the Mughals thus giving it a very royal touch. The royal chefs and cooks were trained to give that distinct royal touch and regal look to anything they cooked. Every detail was accounted for and it was made sure that the food looked fit for the kings. A very high degree of flair and finesse was required to cook the elaborate Lucknow cuisine. Read on about the deliciously famous Lucknowi food.

Cooking a meal for the kings required that extra flair and touch of difference and the presentation required that extra eye for detail. The style of cooking was called as Dum style. This basically means that food was cooked on low flame. This style is carried on till date. The blending of spices in the right proportion and the right way was also not easy. It is a skill that is acquired through rigorous practice and is something that was practiced by generations to come.

The most famous dishes of Lucknow are kormas, kaliya, nahari-kulchas, zarda, sheermal, roomali rotis and warqi parathas. It is not just the ingredients that are special but also the way

they are made by expert hands and the way they are presented. Just looking at an elaborate layout of Lucknow cuisine will make your mouth water. The most famous of all dishes are the Kebabs or the meatballs that come in different varieties. Some of the most famous (and delicious!) varieties of Kebabs are Kakori Kebabs, Shami Kebabs, Boti Kebabs, Patili-ke-Kababs, Ghutwa Kebabs and Seekh Kebabs.

10.6 Avadhi,

Awadhi cuisine is from the city of Lucknow, which is the capital of the state of Uttar Pradesh in Central-South Asia and Northern India, and the cooking patterns of the city are similar to those of Central Asia, the Middle East, and Northern India as well. The cuisine consists of both vegetarian and non-vegetarian dishes. Awadh has been greatly influenced by Mughal cooking techniques, and the cuisine of Lucknow bears similarities to those of Persia, Kashmir, Punjab and Hyderabad; and the city is known for Nawabi foods.

The bawarchis and rakabdars of Awadh gave birth to the dum style of cooking or the art of cooking over a slow fire, which has become synonymous with Lucknow today. Their spread consisted of elaborate dishes like kebabs, kormas, biryani, kaliya, nahari-kulchas, zarda, sheermal, roomali rotis, and warqi parathas. The richness of Awadh cuisine lies not only in the variety of cuisine but also in the ingredients used like mutton, paneer, and rich spices including cardamom and saffron.

Difference between Awadhi and Mughlai cuisine

Awadhi cuisine has drawn a considerable amount of influence from Mughal cooking style and bears resemblance to those of Hyderabad and Kashmir. The cuisine consists of both vegetarian and meat dishes that employ the dum style of cooking over a slow fire that has become synonymous with Lucknow.

Mughlai food is known for its richness and exotic use of spices, dried fruit, and nuts. The Mughals did everything in style and splendor. Since they ate very rich food they reduced the number of intake during the day. Mughlai dishes as they are called have lots of milk and cream with spices to make rich and spicy meal that is the reason why Mughlai recipes are rich in fat, carbohydrates and proteins.

Awadhi food does not use over a hundred spices as some claim, but use a handful of uncommon spices. The slow-fire cooking lets the juices absorb into the solid parts. In addition to the major process of cooking food in Awadhi style, other important processes, such as marinating meats, contribute to the taste. This is especially the case with barbecued food that might be cooked in a clay oven of over an open fire.

Fish, red meats, vegetables and cottage cheese may be marinated in curd and spices. This helps to soften the taste and texture of them as well as remove any undesired odors from the fleshy materials. They were often cooked on tawa, the flat iron griddle, as opposed to Mughlai influence and bear a testimony to the local influence and convenience.

Difference between Awadhi and Mughlai kebabs is that, while the former is usually cooked on the tawa, the latter is grilled in a tandoor. This gives the difference in flavour.

10.7 Malabari,

Coconuts grow in abundance in Kerala, and consequently, coconut kernel, (sliced or grated) coconut cream and coconut milk are widely used in dishes for thickening and flavouring. Kerala's long coastline, numerous rivers and backwater networks, and strong fishing industry have contributed to many sea and river food based dishes. Rice and cassava (Tapioca) form the staple food of Kerala. All main dishes are made with them and served along with Kootan; the side dishes which may be made from vegetables, meat, fish or a mix of all of them. The main dish for lunch and dinner is boiled rice. The Kerala breakfast shows a rich variety; the main dishes for which are made from rice flour, or fresh or dried cassava. Owing to the weather and the availability of spices, the Kerala cuisine is richly spicy especially the hot ones -chilli, black pepper, cardamom, cloves, ginger, and cinnamon.

Historical

For over 2000 years, Kerala has been visited by ocean-goers, including traders from Greece, Rome, the eastern Mediterranean, Arab countries, and Europe. Thus, Kerala cuisine is a blend of indigenous dishes and foreign dishes adapted to Kerala tastes.

Pre-independence Kerala was basically split into the princely states of Travancore& Kochi in the south, and Malabar district in the north; the erstwhile split is reflected in the recipes and cooking style of each area. Both Travancore and northern Malabar cuisine consists of a variety of vegetarian dishes using many vegetables and fruits that are not commonly used in curries elsewhere in India including plantains (Nenthrapazham or vazha-ppazham or ethaykka), bitter Travancore gourd ('pavaykka' in and 'kayappakka' in northern Malabar), Yam ('chena'), Colocasia ('chembu'), Ash gourd (Kumbalanga), etc. However, their style of preparation and names of the prepares dishes may vary. Northern Malabar has an array of vegetarian and non-vegetarian dishes such as pathiri (a sort of rice-based pancake, at times paired with a meat curry), porotta (a layered flatbread, said to come from south east Asia), and the Kerala variant of the popular biriyani, from north India/Pakistan. Travancore region boasts of a parade of dishes like appam that is largely identified with the Saint Thomas Christians (also known as Syrian Christians or Nasrani) of the region.

In addition to historical diversity, the cultural influences, particularly the large percentages of Muslims and Syrian Christians have also contributed unique dishes and styles to Kerala cuisine, especially non-vegetarian dishes. The meat eating habit of the people have been historically limited by religious taboos. Brahmins eschew non vegetarian items. However, most of modern day Hindus do not observe any dietary taboos, except a few of those belonging to upper caste. Muslims do not eat pork and other items forbidden by Islamic law.

Historically, Kerala was part of the Tamil-speaking area, and Tamilian influence is seen in the popularity of sambar, idli and dosa. European influence is reflected in the numerous bakeries selling cakes, cream horns, and Western-style yeast-leavened bread, and in Anglo-Indian cuisine. The import of potatoes, tomatoes, and chili peppers from the Americas led to their enthusiastic use in Kerala, although except for the ubiquitous peppers, the other ingredients are used more sparingly.

Malabar Cuisines

One of the main special cuisines is the Malabar biryani. The dish is famed for its exquisite taste and aroma.Usually chicken is preferred as an ingredient but variants of mutton and egg are also experimented with. Cuisines of Kallummakaya (Green mussel) is another specialty. Numerous dishes like Arikkadukka are made of it. The region is blessed with a large availability of Fresh Prawns, Shrimp, Crab, Mussels e.t.c. The filled foods like kai nirachathu, are some of the exotic dishes that people from other regions will find. The cuisines of exotic nature are mainly Mappila in origin. There are an innumerable variety of dishes, main courses and snacks made by the people of the region. The variety will be evident during the Ramadan season.

10.8 Christian

The south Indian state of Kerala entices visitors with a bouquet of cuisines to offer, ranging from traditional Hindu food, to Malabar Muslim delicacies and the exotic Kerala Syrian Christian cuisine. Each of these distinctive cuisines encompasses an interesting combination of vegetables, meats and seafood flavored with a variety of spices, and characterized by the use of coconut.Kerala Syrian Christian Cuisine is essentially the name given to the distinctive culinary art of the Syrian Christians, who live in large numbers in districts like Kottayam and Pala in Kerala. A gourmet's delight, this cuisine is noted for offering some delectable meat preparations such as lamb stew and 'piralen' - a stir-fried meat marinated in vinegar and spices.

The most favored dish of the Kerala Syrian Christians (or Saint Thomas Christians) is the 'stew'. It is made by bringing chicken and potatoes to a slow boil in a creamy white sauce seasoned with black pepper, cinnamon, cloves, green chilies, lime juice, shallots and coconut milk. These appetizing stews are generally made with chicken, lamb or duck.

Some other popular delicacies of Kerala Syrian Christian Cuisine include 'meat thoran' - dry curry with shredded coconut, 'fiery vindaloos', sardine and duck curries, and 'Meen Molee' - spicy stewed fish. This stew is generally eaten with 'Appam', which is a rice flour pancake with soft, thick white spongy centers and thin, golden, crisp lace-like edges. Other well known preparations are beef cutlets with 'sallas' (a salad made of finely cut onions, green chilies and vinegar) and 'peera pattichathu' (a dry fish dish of grated coconut).

Don't miss trying 'Meen vevichathu' - a famous fish preparation, cooked in fiery red chilly sauce, and Duck Roast while sampling Kerala Syrian Christian Cuisine. One of the exotic items of the Christain cuisine in Kerala is 'erachi orlarthiathu' or red meat. Beef (or lamb) is boiled with

roasted red chilies, cloves, onions, cumin seeds, garlic, ginger, fried coconut chips and a little vinegar. When the water gets reduced, the meat is almost fried dry in a little oil that has been flavored with sliced shallots and curry leaves.

Wine is an essential part of Kerala Syrian Christian Cuisine. Another interesting feature of the cuisine is the liberal use of coconut oil, mustard seeds, curry leaves, and coconut milk.

10.9 Bohri

Food plays an integral part of Bohra's daily life. Apart from the detectable and distinctive cooking style, there are certain traditional ways in which food is prepared and served. One of the important and age old traditions is eating in thal. Thal is large round metal plate, where the family sits around it helping themselves from the same dish, course by course to have any meal of the day. Its considered to be a symbol of unity, equality and sharing. A square cloth called safra is placed on the carpet, and raised metal or wooden round called kundali is placed on which the thal is kept. Even on a daily basis, if a dish has been placed on the thal, there must be at least one person seated before it as food must not be ignored and while the other person eats, one can't get up when done.

Every meal starts and ends with taking a grain of salt which is believed to clear the taste bud and cure many diseases. Another important traditional is of eating sodanna which is basically cooked rice sprinkled with granulated sugar and ghee (clarified butter) to start the meal on special religious occasions. Unlike the common norm, Bohra meal starts with dessert instead of ending with dessert. There are many sweets which are distinguishably Bohra like Malida (a sweet made with wheat and jaggery),lacchka (a cracked wheat halwa, usually made on first day of the year of Bohra calender), Kalamro (a yogurt based rice pudding) to name a few. Sancha (hand cranked) icecreams are also churned on special occasions.

The dessert is followed by a savory appetizers and then a full course meal is served usually accompanied with salad. Rice dishes are made extensively in Bohra cusine from Biryani to all kind of pulaos. Bohra khichda (delicacy made mutton and beaten wheat), kheema khichdi (minced meat pulao), Lagan ya seekh (layered minced meat topped with eggs), kheema na samosa (minced meat samosas), mutton kari chawal (spiced coconut milk based stew served with fragrant basmati rice studded with peas) are some specialties of Bohra cuisine that one can never get enough of.

Bohra's make a variety of soups generally to company the rice dishes. Soups can be cold soups like Sarki (made with tuvar dal garnished with cucumber, tomatoes, spring onions and beaten yogurt), to hot soups like Sarka (made of tuvar dal, groundnut and coconut) to spiced tomato soups.

Different from the western practice of grilling, roasting or searing, meat is often boiled with ginger, garlic and chilly paste. Beef though not restricted, is seldom a choice of meat. The sauce or the gravy for the curry is prepared and the boiled meat is added to create the final dish

resulting in a perfectly soft and succulent chicken or mutton. This could have been adapted from the Arabic way of cooking meat, which often involves boiling meat.

A talk about Bohra food can't be completed without mentioning Dal Chawal Palidu (DCP). DCP is essentially vegetarian a rice dish which had three different components to it. Dal which is the generic name for Indian lentils, chawal referring to rice and palidu is a flour based stew, stewed with drumstick or bottlegourd. The rice is mixed with tuvar dal (pigeon pea lentil) and served with palidu. Boiled mutton can also be added to the dal making it non vegetarian.

Sweets/Desserts

Pineapple halwa - Pineapple pudding Kheer - Indian rice pudding Khajur no Halwo - Date Pudding Appetizer - Savory

Shami kebab - Meat patties made with lentils and spices

Teekha aloo - Spicy potatoes

Maincourse

Non Veg

Gosh ni tarkari - Mutton stew

Lagan ya seekh - Minced meat layered with tomatoes, potatoes and finished with egg

Mutton korma - Mutton cooked in tomato sauce and finished with yogurt and fried onions

Spicy fried fish

Veg

Kefti dal - Mixed lentil soup

Patwalya - Colocasia leaf rolls

Gavarfali ni sabzi - Cluster beans cooked in spices and tomato sauce

Dudhi ni tarkari - Bottle gourd soup

Salads or Sides

Baigan nu bharta - Baigan ka bharta - Roasted eggplant with yogurt

10.10 Question

- 1. Write a short note on Indian cuisine?
- 2. What is the difference between Awadhi and Mughlai cuisine?

- 3. Write the menu of Bohri cuisine?
- 4. Describe the Hyderdabadi cuisine?
- 5. Describe the Malabari cuisine?

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Unit 11 .

Breads of India

Structure

- 11.0 Learning Objectives
- 11.1. Introduction
- 11.2. Types of Breads
 - 11.2.1. Breads from North
 - 11.2.2. Breads from West
 - 11.2.3. Breads from South
 - 11.2.4. Breads from East
- 11.3. Means of Making Indian Breads
- 11.4. Tandoor
 - 11.4.1. History of Tandoor
- 11.5. Tandoor Cooked Dishes
- 11.6. Summary
- 11.7. Review Questions
- 11.8. Suggested Reading

11.0 Learning objective

The objective of the unit is

- a. Introduce types of breads
- b. Various methods of making breads
- c. Importance of breads in Indian Cuisne
- d. Types of breads from various parts of India

11.1 Introductions

The simplest, most common accompaniment to a meal in northern India is usually chapati, or the slightly thicker roti. These are simple flatbreads made of just wholemeal flour (known as *atta*) and water cooked in a flat, cast-iron pan, called a *tava* in India, over the stove. Sometimes they are finished off by being put directly on a flame until they puff up. This is a bread that anyone can make, even the poorest of the poor who only have an open flame.

From there, breads become more complex. There are layered parathas with or without stuffing, deep-fried puris and luchis, and cracker-like pappadums.

11.2 Types of Breads

- 1. **Naan.** A leavened bread made with yeast or bread starter, white or whole-grain flour, and water or sometimes milk, naan is baked in a tandoor, or oven. It yields a thick flatbread, similar to pita. As you probably already know, it tastes best fresh out of the oven with a smear of ghee (clarified butter) or butter, and is perfect for sopping up curries.
- 2. Chapatis and rotis. These unleavened flatbreads are served with nearly every meal in India and are often eaten three times a day. Chapati and roti are used instead of utensils in most of India; you rip off a piece and use it to scoop up a portion of food.

These flatbreads are made from a dough comprised of whole-wheat or atta flour and water that is then rolled into a thin, flat disc with a rolling pin. The rolled-out dough is cooked on a dry tava, or skillet. In some regions, after several minutes on the skillet, it is then put directly on a flame, making it puff up like a balloon and get a little steamy on the inside.

One popular variation is missi roti, which uses a dough that combines the wheat flour with chickpea flour (also known as gram flour or besan) and sometimes includes spices like cumin seeds, turmeric, and coriander leaves.

3. Parathas.



Parathas are a variation of chapatis and rotis. They also use whole wheat or atta flour and water to make a dough that is then cooked on a tava or skillet.

There are then two ways to cook the dough. It can be left unstuffed, and the flattened disc is folded into fourths and then re-rolled, giving it a flaky, layered texture. Or it can be stuffed with various vegetables, such as cauliflower or greens, or the Indian cheese called paneer.

4. **Puris.** Puris, which originated in the southeastern Indian state of Orissa, are the classic deep-fried breads of India. Puris are made from a simple dough of whole-grain wheat flour or atta, water, and salt. The dough is then rolled out into small, flat circles or into a

larger form that small circles are cut from. The flat circles are then deep-fried in ghee or vegetable oil.

You can make two types of puris this way: flat or puffed. If you want a flat puri, prick several holes into the dough before frying to allow steam to escape. To get a puffed-up puri, leave the dough as is. If left unpricked, the puri puffs up like a ball when it is fried due to moisture in the dough, which transforms into steam that expands.

Puris can be eaten immediately and will have a crispy outside but a softer inside, or they can be stored and used later. Puris that have been stored are crunchy throughout and are used in Indian snack foods like pani puri or sev puri.

- 5. Luchis. A variation of puris, luchis use fine maida flour instead of atta. Maida is a refined flour made from the starchy endosperm of the grain and resembles cake flour. This is mixed with water and ghee to form a dough. It is then made into balls, rolled out, and deep-fried in ghee. Luchis are typical of West Bengal, Orissa, and Assam in India.
- 6. **Dosas.** These crêpe-like flatbreads are from south India and have multiple variations, but the basic recipe calls for a mixture of rice and *urad dal*, Indian black lentils, that have been soaked in water and are then ground to form a batter, which then sits overnight to ferment.

When the dosas are ready to be cooked, a thin layer of batter is ladled onto a greased, hot tava or skillet. Dosas are either folded in half or rolled like a wrap, and often have a filling inside. They are usually served with sambar and chutney.

7. Uttapams. Uttapams are dosas' thicker cousins. Like dosas, their batter is also made with urad dal and rice that are soaked and then ground into a batter and left overnight to ferment.

Uttapams are also cooked on a tava or skillet, but the batter is spooned on much thicker and left to cook on one side until bubbles form — just like a pancake — and then flipped. The result is a crisp outer surface and a soft and spongy inside. Toppings like onions and tomatoes are very common, leading some people to refer to uttapams as "Indian pizza."

8. **Pappadums.** These are the most cracker-like of all the flatbreads. They are made with either chickpea or urad dal flour (also known as black gram), salt, peanut oil, and spices like black pepper, chile powder, and cumin. The dough is shaped into a thin disc and dried in the sun. It then can either be deep-fried, roasted over an open flame, or even microwaved

11.2.1 Breads From North:

PHULKA	Common roti made from atta flattened and griddled on a hot tava.
MAKKAI KI ROTI	Slightly thicker than Paratha. This roti is made from Maize and is the size of chappathi.
LAAL ROTI	with beetroot.
ROGANI ROTI	with saffron.
PIAZ KI ROTI	contains chopped onions, green chillies and mint leaves.
PUDINA ROTI-	Stuffed mint paste.
LASSAN ROTI	Garlic roti.
SHEHAD KI ROTI	Honey roti(honey is added to the dough)
AMRITSAR KA PARATHA	Each layer of this Paratha, a layer of flour and ghee is applied. The rolling is different from that of a Paratha.
MUGHLAI PARATHA	The soft dough is shaped into round balls and then flattened ghee is applied and then folded. This is done for a couple more times. It is presses into a square and brushed with eggs and the corners are turned towards the center. Cooked on a hot griddle.
KHASATA ROTI	These are Crisp and have a flavor of cumin which is incorporated during the dough making process. They are made just as Parathas.
SHAHI ROTI	Made all over Northern India, especially U.P. A very rich Roti stuffed with a paste of almonds & ghee
BAIDA PARATHA	This is stuffed with a mixture of Eggs, salt, paneer, coriander & 1 tsp of Ghee or oil.
BIRAHI PARATHA:	This paratha dough is stuffed with chick pea dough, rolled out to the size of Puri. Cooked in a griddle with little fat.

LACHHA PARATHA	Here the dough is made into rope. Then rolled into a circle and rolled out 3 times, half cooked and be rolled and ghee is applied in between every layer while rolling.
KASHMIRI ROTI	Also called taktaki. Here wheat four is sifted along with pepper and aniseeds, asafoetida and carum and the liquid used is milk.
NAAN	Leavened bread of North India. It is mainly from UP. Here soft dough is made with flour, salt,soda, curd and butter. Given the shape of the tear drop and topped with ghee / butter, sesame seeds and poppy seeds and baked in a Tandoor. KHAMEERI is naan leavened with yeast.
BADAMI NAAN	sesame seeds and almonds are sprinkled on top.
ROGHNI NAAN	Roghni means red. Naan sprinkled with saffron.
SHAHJAHANI NAAN:	Naan stuffed with cooked mixture of garlic, tomato, kheema, parsley, salt and pepper.
KHANDARI NAAN:	Naan stuffed with nuts, dry fruits & paneer.
TAFTAN	Leavened bread with rice flour, milk, yoghurt and eggs from U.P. It can be made perfectly under hot grills and Tandoor.
SHEER MAL	Smooth dough with flour, salt, eggs, raisins, khoya, double cream, ghee and yeast mixture. Proven for 8 hours, then flattened, proved again until double in size, brushed with melted ghee/ butter and saffron solution. Sprinkle with poppy seeds.
ROOMALI ROTI	Soft dough is made, the rounds are flattened, swung in the air and cooked in a heated inverted griddle. It takes hardly on minute to cook and should be folded like a hand kerchief.(Roomal= handkerchief)

BAQARKHANI	It is a richer version of sheer maal. The traditional method of making Baqarkhani is by DUM cooking.
BHATURA	Deep fried leavened bread of Punjab made with maida , sour curd, soda bicarb /yeast, ghee and salt.
BANJARA ROTI:	It is a crispy roti made with bajri flour, chopped green chilli, ginger, garlic and yoghurt.
PURI PATIALA	This is a Patiala style of puri. Here a dough is made with flour, semolina, rice flour, salt, turmeric powder. The dough is rolled thick, coated with a paste of rice flour and ghee, cut into rounds and then deep fried
AMRITSAR KI LUCHI	Deep fried crispy bread from Punjab.
BHOPALI ROTI	Equal quantity of wheat flour and rice flour mixed with ground cumin seeds, green chillies, broken cashew nuts, fresh coriander leaves, saffron, warm milk and water to make a soft dough. This is then rolled and cooked like a chapathi.
SADA KULCHA	Leavened bread of Punjab, it is made from maida and ghee and can be stuffed with a variety of fillings.
SWEET WARQI ROTI	It is a sweet Roti, sweetened with caster sugar with the flavor of cardamom. It is rolled and baked in an oven at 140 degrees for 30 mts.
GADAI ROTI:	One of the popular breads of UP. This is stuffed with a mixture of peas, cumin seeds, garlic, green chillies and fresh coriander.
MALAI ROTI	It is a delicacy of Punjab. The uniqueness of the roti is in its folding. It is cooked like parathas.
PUNJABI LACHA PARATHA	This is made like paratha with lots and lots of oil.

11.2.2 Breads From West:

BERMI ROTI	Seen in Jodhpur Part of Rajasthan. It is stuffed with a mixture of ground moong dal, onions, 1 tsp salt, chilli powder, onion seeds and asafetida.
KHAKRA	Crispy roti from Gujarat. Here garam masala is added to the dough. This roti is from Gujarat area. When people travel, this roti is carried by them for meals as Khakhra's remain for a long time. Eaten with pickle
GOBI KA PARATHA	It is a Bombay speciality. Cauliflower is grated and mixed with lime juice, chilli, 1 tsp salt, coriander, onions and ginger. This is stuffed into the paratha rolled and shallow fried on a hot griddle until; both the sides are brown
METHI NI BHAKRI:	This is a traditional gujarathi roti using bajra flour/ wheat flour, chopped fenugreek leaves, green chillies and turmeric powder.3" diameter flattened with palm.
ROTLI	Gujarathi preparation. Rotlees are thinner and softer than Chapattis. It is a unique style of cooking. It is griddled on one side and then cooked on direct flame.
YEHUDI ROTI	Jewish roti. Refined flour bread, baked and usually served with grilled meat.
PAKWAN:	It is a popular dish of Sindh region. Leavened bread. it is flattened to round disc, pricked using a fork and deep fried.
TIKKAR	Bread of Malwa region popular with peasants. It is a thick roti made of wheat and corn flour, mixed with lots of chopped garlic, onions, tomatoes, green chillies and coriander leaves. Cooked, dry on Indian griddle(TAWA)
METHI THEPLA:	Dough is a mixture of wheat flour and jowar /Bajra flour with fenugreek, coriander powder, chillipowder and turmeric added on. It is made like chapathi.
FHEFRE	Rajasthani bread. Thick piece of dough is flattened round,by pressing of palm, baked on thava; traditional fuel is 'KANDA' (dried cowdung fuel)
MASALA BATI	The dough shaped into rounds and dry roasted in a charcoal
	4

	fire of dry cowdung. When cooked they are cleaned and put into a bowl filled with ghee. It is served hot with dal /kadi.
BAFLA	It is a rotis cooked first in lentil soup and then dry roasted.
MISSIE ROTI	It is made from wheat four, Bengal gram flour, spinach, onions and cumin seeds. Served mainly with veg. /meat dishes.

11.2.3 Breads From South

CEYLONESE ROTI	This is from Chennai region of India. Here coconut is added along with the dough. It is a leavened bread. Cook in a griddle until brown specks appear on both sides.
DOSAI	South Indian bread. Fenugreek flavoured batter is made with ground rice, urad dal (3:1). It can be stuffed with kheema or potato. Notable variation is Oothappam which is more thicker and smaller in radius than Dosai.
COORGI ROTI	Snow white rice flour roti of coorg. Dough is made of rice puree. Cooked like Chapathi.
PESARAATTU	Andra 's dosai made out of green gram savoured with chutney.
ADAI	Pancake rich with wide variety of cereals (rice,urud,chenna,moong)and vegetables(onion, garlic ,chilli).Specialty of Tamilnadu.
АРРАМ	It is a Christian breakfast preparation from Kerala. Dutch pancakes made with rice, toddy fermented and prepared in special 'chatty' * often had with mutton stew. *Concave moulds made from cast iron
IDDIAPPAM	Strands of rice noodle, sandwiched, steamed and served with stew. Authentic kerala breakfast.
PUTTU	Kerala steamed breakfast preparation sandwiched with fresh coconut. Made from rice, wheat or ragi. Accompaniment could be ripe bananas, chickpea stew, green gram or fish curry.

OROTTI	Chapatti made from a dough of mashed cooked rice .		
KADUMPUTTU:	Steamed dumplings of rice grains ('thari') and coconut milk.		
THALIYA PUTT	Steamed cake of rice grains (thari) and coconut milk.		
PATTIRI	Rice flour chapattis from Malabar served with mutton/chicken stew.		

11.2.4 BREADS FROM EAST:

DHAKAI PARATHA	It is shallow fried flaky bread of Bengal (Dhakka). Here the way in which it becomes flaky is unique. It is rolled into rounds, dusted with rice flour ,cut along the radius and then folded into a cone and pressed down.
BATHUWAY KI ROTI – (Spinach)	This from Bihar. This uses spinach as a stuffing and uses warm water for kneading.
PHULKO LUCHI	It is puffed, deep fried bread of Bengal made with refined flour (with 10% fat incorporated into dough)
RADHABALOBHI LUCHI	Deep fried of West Bengal made from a dough containing atta, dal flour, aniseeds and ghee is mixed to make dough

11.3 Means of Making Indian Breads

- 1) Tandoor: Naan, Tandoori roti, Khameeri roti, etc.
- 2) Concave Tava: Fulka, Paratha, Makkai-ki-roti, etc.
- 3) Kadhai: Poori, Bhatura, Kachori, etc.
- 4) Conventional Oven: Bakarkhani, Sheermal, etc.

With the help of above mediums, we are using 5 methods of cooking for making bread:

- 1. Deep frying,
- 2. Shallow frying,
- 3. Baking,
- 4. Tandoor, and
- 5. Broiling.

11.4 TANDOOR

The tandoor is used for cooking certain types of Afghan, Pakistani and Indian, foods such as tandoori chicken, chicken tikka and bread varieties like tandoori roti and naan. The tandoor is basically used to cook meat while Hindus and Sikhs of India are mostly vegeatarian so it was popularised during Muslim reign in South Asia. It is thought to have travelled to Central Asia and the Middle East along with the Roma people, who originated amongst the Thar Desert tribes.

The tandoor is also known by other names -

- In India, the tandoor is also known by the name of **bhatti.** The Bhatti tribe of the Thar Desert of northwestern India and eastern Pakistan developed the Bhatti in their desert abode, and thus it gained the name.
- In Armenia, It is known as a **tonir** which is a widely used method of cooking barbecue and lavash bread.
- In Georgia it is called a **tone** and is used for bread and kebab.

11.4.1 HISTORY

The basic construction of a tandoor is rather simple. It is a large bell shaped earthen pot with an opening on the top to allow coal to be tipped in or skewers of food to be cooked and an opening at the side to allow air to pass to fan the flames. Tandoors are then insulated with sand and earth and are encased in tiles or metal.

The ingredients that go into the making of a tandoor are rather complex and they do not merely contain clay. Apart from clay, horsehair, strands of woven coir and sometimes even human hair are added to increase its strength. Once a tandoor has been installed it has to be gradually tempered. At first a small amount of coal is heated at its base. A cooked mixture that comprises of ground spinach, yoghurt, palm sugar and mustard oil is massaged evenly to its insides. Gradually every day the amount of coal is increased and the layering of the insides with the spinach – palm sugar mixture continues. This process takes about five days to a week. Once the tandoor has been suitably tempered, coal and heat can be increased without fear of it breaking up.

Tandoors supposed to have originated from somewhere in the Middle East and migrated to Asia through trade and invading armies.

The birth place of the tandoor will always lie in the region comprising North India,parts of Pakistan and Afghanistan and the South-West of China. Apparently the tandoor was supposed to have been brought in by the migrating Aryan tribe. The theory holds that the Aryans were originally from India who travelled in search of grazing lands to the Caucasus mountains and returned back to India after a couple of centuries. It was them who carried the tandoor from India around Asia and back again.

Because the temperatures in a tandoor can be as high as 480°C (900oF), they were rarely kept indoors but out in the open. Since a tandoor required a substantial amount of fuel to keep it hot, they were used mainly in the communal fashion. Entire villages shared a tandoor with the womenfolk gathering around to bake their breads on the hot inner walls whilst exchanging gossip. The tandoor in the village slowly replaced the village square as a place for heralding the king's proclamations, exchanging views or for festivities. Now with the onslaught of modernization came a slew of modern tandoors. Gas or electric operated, cement or fibreglass.... the list is endless.

The heat for a tandoor was traditionally generated by a charcoal or wood fire, burning within the tandoor itself, thus exposing the food to live-fire, radiant heat cooking, and hot-air, convection cooking, and smoking by the fat and food juices that drip on to the charcoal. Temperatures in a tandoor can approach 480 $^{\circ}$ C (900 $^{\circ}$ F), and it is common for tandoor ovens to remain lit for long periods to maintain the high cooking temperature. The tandoor design is something of a transitional form between a makeshift earth oven and the horizontal-plan masonry oven.

From ancient times till now the Tonir was worshiped by the Armenians like other sun symbols and it is known as a symbol of Sun in the ground.

Ancient Armenians made **Tonirs** in resemblance with the setting sun "going into the ground" (Sun being the main deity). The underground, clay **Tonir** is one of the first tools of Armenian cuisine, as an oven and as a thermal treatment tool. Everything that is made in pots and in **Tonir** has Armenian origin, but only Armenians had underground **Tonir**. Other nations have borrowed the Tonir from Armenians and are using it nowadays, but only Armenians are aware of the ritual meaning of the Tonir. Armenians were already using the tonir thousand years ago. In the stage of sunworshipping, the Tonir is considered to be the symbol of sun on the earth. Pagan Armenians have similared tonir with sunset. Every time Armenian women are baking bread or preparing food, they bent down before the Tonir, which also meant worship for deity.

Unlike other people, who also may have something like the Tonir to bake bread, the Armenian Tonir has been used for different purposes. The Armenians cooked meals in the Tonir, they used the Tonir to heat the house, moreover, it was perfect for medical purposes, for example, to warm and cure the sick and afficted. Obviously, the traditional tonir has a great medicinal effect. In ancient times it has been situated in the center of the house, which was symbolizing the permanent providing of sun heat in the house. They were putting "kursi" on the Tonir, were covering it with a carpet and they were putting their feet under the "kursi" in cold days. The

Tonir had also a non bacterial effect, as they have used the cow's dung, as a fuel, which has been famous for its medicinal traits since ancient times.

Formerly, the Tonir hasn't only an impotant meaning in Armenian cuisine, but also in lifestyle. In traditional families the Tonir has always been identified with "home". It is no secret, that in ancient times Armenian families have lived under one single roof, where, as a rule, in the center of the large room was a Tonir. It was the base of the Armenian family, where they were not only baking bread and preparing food, but also proceeded Armenian family's life in good, old times around it. They were marrying, baptizing a child and even healing near the Tonir. The members of the family were gathering around it at dinner time, or during the parties and the rest. In the Armenian Highlands they have baked bread 3-2 milleniums before the birth of Christ. That confirms the clay ovens (tonir) and the relics of bread, which have been discovered in a variety of old places. During the excavations of Artashat city, Armenia, there have been discovered tonirs of that same period.

Though the rules of lifestyle have changed in time, the custom of baking Lavash, bread, gata and making a lot of food in a Tonir has remained unbreakable.

Smoke of tonir is continuing to stay the symbol of peace, unification and strengthening of Armenian family and home.

Since 2012 "Tonraton" – the Food Festival has been held in Armenia. On August 11, for the Navasard holiday (the old Armenian "New Year", which was dedicated to Armenian pagan gods), featuring dishes cooked in this forefather of the modern oven.

11.5 Tandoor cooked dishes

Flatbread

A tandoor may be used to bake many different types of flatbread. Some of the most common are Tandoori Roti, Tandoori <u>Naan</u>, Tandoori Laccha <u>Paratha</u>, Missi Roti, and Tandoori <u>Kulcha</u>.

Peshawari Seekh

Roasted Cashews, corn and cottage cheese paste marinated in spiced thick cream grilled in Tandoor.

Achaari Khumb ke Soole

Mushrooms marinated in pickled yoghurt and jodhpuri spices grilled in Tandoor.

Baluchi Aloo

Potatoes stuffed with cottage cheese, vegetables and cashew nuts, roasted in Tandoor.

Tandoori chicken

Tandoori chicken is a roasted chicken delicacy that originated in Punjab region of India and Pakistan. In India, tandoori cooking was traditionally associated with Punjab. Punjabis embraced

the tandoor on a regional level and became popular in the mainstream after the 1947 partition when Punjabis resettled in places such as Delhi. In rural Punjab, it was common to have communal tandoors. Some villagesstill have a communal tandoor which was a common sight prior to 1947.

The chicken is marinated in yogurt marinade seasoned with garam masala, garlic, ginger, cumin, cayenne pepper, and other spices depending on the recipe. In hot versions of the dish, cayenne, red chili powder, or other spices give the typical red color; in milder versions, food coloring is used. Turmeric produces a yellow-orange color. It is traditionally cooked at high temperatures in an earthen oven (i.e. tandoor), but can also be prepared on a traditional grill.

Chicken tikka

Chicken tikka (murgh tikka) is a dish from Mughlai cuisinemade by grilling small pieces of chicken which have been marinated in spices and yogurt. It is traditionally cooked on skewers in a tandoor and is usually boneless. It is normally served and eaten with a green coriander chutney, or used in preparing the curry chicken *tikka masala*.

Kalmi kabab

Kalmi kabab, a popular snack in South Asian cuisine, is made by marinating chicken drumsticks and placing them in a tandoor. Various freshly ground spices are added to the yogurt to form a marinade for the chicken. Traditionally, the marinaded chicken is given 12 hours at the least. When prepared, the drumsticks are usually garnished with mint leaves and served with laccha (finely sliced half moons, with a squeeze of lemon and a pinch of salt) onions.

11.6 Summary

The simplest, most common accompaniment to a meal in northern India is usually chapati, or the slightly thicker roti. These are simple flatbreads made of just wholemeal flour (known as *atta*) and water cooked in a flat, cast-iron pan, called a *tava* in India, over the stove. Sometimes they are finished off by being put directly on a flame until they puff up. This is a bread that anyone can make, even the poorest of the poor who only have an open flame.

The tandoor is used for cooking certain types of Afghan, Pakistani and Indian, foods such as tandoori chicken, chicken tikka and bread varieties like tandoori roti and naan. The tandoor is basically used to cook meat while Hindus and Sikhs of India are mostly vegeatarian so it was popularised during Muslim reign in South Asia. It is thought to have travelled to Central Asia and the Middle East along with the Roma people, who originated amongst the Thar Desert tribes.

11.7 Review Questions

Q1 Discuss various types of breads?

- Q2 Briefly explain 5 types of breads from North?
- Q3 Briefly discuss 5 types of breads from South?

Q4 Briefly discuss 5 types of breads from West?

- Q 5 Discuss the history if Tanoor and its origin.
- Q 6 Write a short note on the various dishes cooked on tandoor.

11.8 Suggested Reading

- Albala, Ken (2011.) Food Cultures of the World Encyclopedia Greenwood. ISBN 978-0-313-37626-9
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UNIT 12

INDIAN SWEETS

Structure

12.0 Objective
12.1 Introduction
12.2 History
12.3 Varieties
12.3 Other Indian sweets
12.4 List of Regional Sweets
12.5 Summary
12.6 Review Questions
12.7 Suggested Reading

12.0 Objective

The unit will introduce learners to the origin of various sweets of India with impact of regional practices. The learner will also understand various types of sweets popular in India. The learner will also be able to identify various methods and ingredients.

12.1 Introduction

Mithai vary regionally, and common sweets such as barfi and laddu are available everywhere. Many places have a sweets specialty. In areas such Bengal, the sweet capital of India, towns and villages have their own particular variety. Ingredients and local practices have deep impact on the types of sweets prepared and consumed in the region.

12.2 History



Payas (or Kheer as it is called in Hindi). Recipes for making it are present in the 11th century Mānasollāsa.

Ancient Sanskrit literature from India mention feasts and offerings of mithas (sweet). One of the more complete surviving document, with extensive description of sweets and how to prepare them is the Sanskrit document, Mānasollāsa) this ancient encyclopedia on food, music and other Indian arts is also known as the Abhilaşitārtha Cintāmaņi (the magical stone that fulfils desires). Mānasollāsa was composed about 1130 AD, by the Hindu King Somesvara III. In this document, meals are described to include a rice pudding it calls payasam which is another word for kheer. The document mentions seven kinds of rice.

Mānasollāsa also describes recipes for golamu as a donut from wheat flour and scented with cardamom, gharikas as a fried cake from black gram flour and sugar syrup, chhana as a fresh cheese and rice flour fritter soaked in sugar syrup that the document suggests should be prepared from strained curdled milk mixed with buttermilk, and many others. Mānasollāsa mentions numerous milk-derived sweets, along with describing the 11th century art of producing milk solids, condensed milk and methods for souring milk to produce sweets.

The origin of sweets in Indian subcontinent has been traced to at least 500 BC, where records suggest both raw sugar (gur, vellam, jaggery) as well as refined sugar (sarkara) were being produced. By 300 BC, kingdom officials in India were including five kinds of sugar in official documents. By the Gupta dynasty era (300–500 AD), sugar was being made not only from sugar cane, but other plant sources such as palm; sugar-based foods were also included in temple offerings, as bhoga for the deities, which after the prayers became Prasād for devotees, the poor or visitors to the temple.

12.3 Varieties

Barfi

Mithai in India; Burfis may be garnished with shiny foil vark.

Barfi is a sweet, made of milk solids (khoya) or condensed milk and various other ingredients like ground cashews or pistachios. Some barfi use various flours such as besan (gram flour). Barfi may be flavored with pastes or pieces of fruits such as mango, banana, berries, coconut. They may include aromatic spices such as cardamom and rose water to enhance the sensual impact while they are consumed.

Sometimes a thin inert silver or gold layer of edible foil is placed on top face of *burfi* for an attractive presentation. Gold and silver are approved food foils in the European Union, as E175 and E174 additives respectively. The independent European food-safety certification agency, TÜV Rheinland, has deemed gold leaf safe for consumption. Gold and silver leaf are certified kosher. These inert metal foils are neither considered as toxic to human beings nor broader ecosystem.

Cham cham

Cham Chams are prepared from flattened *paneer* (a form of curdled milk solids, cheese) sweetened in syrup.

Chena Murki

Chhena murki, or chenna murki, is a sweet made from an Indian version of cottage cheese, milk and sugar in many states such as Odisha. Milk and sugar are boiled to a thick consistency. Round, cubes, cuboid or other shapes of cottage cheese are soaked in the milky condensate. Other flavors and aromatic spices are typically added. It is also known by Bangladeshi and Guyanese people as pera.

Chikki

Chikki is a ready-to-eat solid, brittle sweet generally made from casting a mix of dry nuts and hot jaggery syrup. Peanuts and jaggery mix are most common. Other than almonds, cashews, walnuts, sesame and other seeds, varieties of chikki are also prepared from puffed or roasted Bengal gram, puffed rice, beaten rice, puffed seasonal grains, and regional produce such as Khobara (desiccated coconut). Like many Indian sweets, Chikki is typically a high protein delicacy.

Gajrela

Gajrela, also called *Gajar halwa*, is a seasonal pudding-like sweet made from the root vegetable carrot. It is popular in Punjab regions of India and Pakistan, agricultural belt of North India, now common in many parts of South Asia. It is made by slowly cooking carrot with ghee, concentrated and caramelized milk, mawa (khoya) and sugar; often served with a garnish of

aromatic spices, almonds, cashews or pistachios. The recipes vary by region, and Gajrela may be cooked without ghee, then include cheese or other milk solids for sophisticated mix of flavors. It is common in Indian restaurants, and also a seasonal street and cafe food during post-monsoon through spring festive celebrations.

Gulab jamun

Gulab jamun is a common sweet found in Bangladesh, India, Nepal and Pakistan. It is made out of fried *chenna* (milk solids and cheese) balls soaked in sweet rose-water flavoured syrup.

Jalebi or Imarti

Jalebi is made by deep-frying a fermented batter of wheat flour with yoghurt, in a circular (coillike) shape and then soaking it in sugar syrup. Imarti is a variant of Jalebi, with a different flour mixture and has tighter coils. Typically Jalebi is brown or yellow, while Imarti is reddish in colour. Often taken with milk, tea, yogurt or Lassi. In classical Sanskrit literature, *jalebis* have been referred to as *kundalika* or *jalavallika*.

Khaja

Khaja is a sweet of India. Refined wheat flour, sugar and oils are the chief ingredients of khaja.

It is believed that, even 2000 years ago, Khajas were prepared in the southern side of the Gangetic Plains of Bihar. These areas which are home to khaja, once comprised the central part of Maurya and Gupta empires. Presently, Khajas are prepared and sold in the city of Patna, Gaya and several other places across the state of Bihar. Khajas of the Silao and Rajgir are known for their puffiness.

Khajas have travelled to some other parts of India, including Andhra Pradesh and Odisha. Khaja of Kakinada is a coastal town of Andhra Pradesh. Where as khaja of Puri is too famous. At first, the batter is of wheat flour, mawa and oil. It is then deep fried until crisp. Then a sugar syrup is made which is known as "pak". The crisp croissants are then soaked in the sugar syrup until they absorb the sugar syrup. In Kakinada, Khaja is dry from outside and full of sugar syrup from inside and is juicy.

Kulfi

Kulfis are traditional South Asian ice-cream, where flavored milk is first condensed and caramelized by slow cooking in presence of a small quantity of rice or seasonal grain flour; once condensed, dry nut pastes and aromatic spices are added, the mix frozen in small earthen or metal cans This creates one of the densest known form of frozen sweets; it is typically served

between -10 to -15 C when they are easier to spoon and eat. It comes in a variety of flavours such as mango, kesar, pistachios, *badam* (almond), coconut and plain. It is also a street side urban as well as rural India summer time snack and festive sweet, where food hawkers carry around frozen mounds of kulfi in a big earthen pot and play a particular horn music to attract customers. These vendors are known as "kulfiwalla" (one who sells kulfi).

Kheer or payas

Kheer is a pudding, usually made from milk, sugar and one of these ingredients - vermicelli, rice, Bulgar wheat, semolina, tapioca, dried dates, and shredded white gourd. It is also known as "Payas".

As sweet rice pudding, payas has been a cultural dish throughout the history of India, being usually found at ceremonies, feasts and celebrations. In many parts of India, ancient traditions maintain that a wedding is not fully blessed if payas (or payasam as known in South India) is not served at the feast during traditional ceremonies like marriage, child birth, annaprasan (first solid feed to child), and other occasions. Other than sweet yoghurt, some families include kheer in the last meal, as hospitality and auspicious food, before a family member or guest departs on a long journey away from the home.

Laddu

Laddu (sometimes transliterated as laddoo or laadu) is made of varieties of flour, grains, pulses, semolina, regional or seasonal fruits, dry fruits, and other ingredients cooked with sugar, then shaped into bite-size or larger spheres. Laddu is mentioned in ancient Sanskrit documents as temple offerings, and is referred to as *Ladduka*. They are popular all over India, easy to prepare, and come in dozens of varieties. Laddu is often made to celebrate festivals, religious ceremonies, or household events such as weddings.

One example of laddu is Motichoor Ka Ladoo. It is a sweet food in states like Bihar, made from roasted gram flour flakes which are sweetened, mixed with almonds, rolled into a batter which is then cast into mini balls and fried in ghee. Every mini ball called 'boondi' has enough sugar that melts like a fresh sweet. The mini balls are then combined with aromatic spices and then formed into bite-size spheres, which are called *Motichoor Ka Ladoo*. When bit, the mini balls distribute over the tongue for a burst of flavors throughout the mouth. Other examples include *Tirupati Laddu* so popular that over a million *Laddu* are distributed every week from a single temple of Lord Venkateswara.

Malpoa
Malpoa is the most ancient homemade sweets of India. It is a form of pancake (made of wheat or rice flour) deep fried and sugar syrup.

Narkel Naru

Narkel Naru is a dessert from Bengal. They are ball-shaped and made from khoa/condensed milk and coconut, a traditional food during Pujas such as the Lakshmi Puja.

Parwal Ki Mithai

Parwal Ki Mithai is a dry sweet made of the vegetable parwal, a kind of gourd. The shell of parwal is filled with milk solids, then cooked. It is rather popular in Bihar, but also found in Uttar Pradesh and West Bengal.

Pathishapta

Pathishapta is a Bengali dessert. The final dish is a rolled pancake that is stuffed with a filling often made of coconut, milk, cream, and jaggery from the date palm. These desserts are consumed in Thailand as well.

Rasgulla, a popular sweet dish made from cottage cheese.

Rasgulla

Rasgulla is a popular sweet in South Asia. They come in many forms, such as *Kamalabhog* (Orange Rasgulla), *Rajbhog* (Giant Rasgulla), *Kadamba* often served with *kheer*, *Rasamundi*, *Raskadamba*, and others. Some are white, others cream, brown, gold or orange colored. They are called *Rasbari* in Nepal. This dish is made by boiling small dumplings of *chhenna* and semolina mixture in sugar syrup. Once cooked, these are stored in the syrup making them spongy. Increasing the semolina content reduces the sponginess and hardens them, creating variety of textures. Some *Rasgulla* are stuffed inside with treats, such as dry fruits, raisins, candied peel and other delicacies to create a series of flavors experienced as they are consumed. Some versions, called *danedhar*, are removed from syrup and sugar coated into shapes of fruits and other creative designs. These are festive foods found year round, in many parts of India.

Sandesh

Sandesh is a sweet made from fine cheese made from cow's milk kneaded with fine ground sugar or molasses. This is a sweet from West Bengal and Odisha. Revered for its delicate making, and appreciated by the connoiseur, this represents sweet making at its finest. Sandesh comes in two varieties, "Norom Pak" (the softer version) and "Koda Pak" (the harder version). The softer version although more gentle and considered better, is fragile. The harder version is robust and

often easier for storage. Molasses made from dates can be used to make a special variation of Sandesh called "Noleen Gurher Sandesh" (a Sandesh made from "Noleen Gurh" or molases from dates) or simply "Noleen Sandesh".

Sel Roti

Sel roti is a Nepali home-made circular-shaped bread or rice donut, prepared during Tihar, a widely celebrated Hindu festival in Nepal. It is made of rice flour with adding customized flavors. A semi liquid rice flour dough is usually prepared by adding milk, water, sugar, butter, cardamom, cloves and other flavors of personal choice.

Shrikhand

Shrikhand is a creamy dessert made out of strained yogurt, from which water is drained off completely. Dry fruits, mango puree, saffron or cardamom and sugar are added to the thick yoghurt to get the desired flavour and taste. It is served chilled. It is a West Indian traditional dish.

12.3 Other Indian sweets

Barfi

Barfi are the types of fudge. Their have some from the Persian word, meaning - Snow; and in their original form they were probably all white. Barfi is based on Khoya. Khoya is a milk product which is very sweet.

Sandesh

Sandesh is based on Chenna, mixed with sugar, is one of the finest Indian sweet. Sandesh can be made of varity of shape and texture and flavour and often pressed into decorative moulds. As a specialty of Bengal, Sandesh are shaped into form such as dove, shell or fish, which are representative of that area.

Halva

Halva has a thick, pudding like texture and are based on ingredients such as semolina, grated carrots, brown flour and pusles.

Laddu

Laddu are named for their ball shape rather than their ingredients.

Deep Fried

Sweets are deep fried in oil and then soaked in sugar syrup such as jalebies and imarti.

Milk based

Sweets made using milk as main ingredient in form of -

Milk - Kheer, Payassm, Pal Payer, Suodh pak etc.

Khoya - Barfi, Peda

Chenna - Rasagullas, Rasmalai, Gulab Jamun, Kher Mohan, Raj Bhog

Curd - Shrikhand

SOME INDIAN SWEETS

Angoori Petha

Pieces of winter melon which have been candied in sugar syrup until they are translucent, Angoori means they are still syrupy rather than non-pleetely dry.

Kubani Ka Mitha

An apricot dessert of hyderabad made with soaked, dried apricot, cinnamon, rose and vanila essence and pistachio nuts. It is served with cream.

Amrit Kumbh

Made from shenna, shaped into litle pots and filled with sweetened paneer. The name means 'Pot of Nector'. The sweet is named after the 'Amrit Kalash', an outcome of Sanwdra mantha by Deva and Ashur.

Badam Chop

A sanwitch made from the pieces of almond based dough filled with malai and decorated with whole almonds and chopped pistachio. Badam chop is a very rich sweet.

Misti Dol / Lal Dol

Rid yoghurt which is sweetened and served in little pots. Lal Doi is of one of the the Kolkata's famous sweet.

Kheer Mohan

Balis made of chenna flavoured with saffron. it is cooked in sugar syrup and then split in halva and filled with malai flavoured with pistachios and saffron.

Halva

halva mean sweets in Arabic and refers to thick mixtures made from vegetable or grains.

Jalbhara

Jalbhara means 'filled with water'. It is made from chenna containing rose water in centre.

Jalebi

Jalebi is loops of dough made from fermented flour batter; which is squeezed through nozzle into hot oil, then soaked in sugar syrup.

Kaju Kalash

Small pot shaped sweets made by cooking ground cashew nuts in sugar syrup till it thickens enough to set, decorated with Chandi Ka Varak and saffron.

Kala Jamun

Balls of milk-based dough which are deep fried to a very dark brown. then soaked in sugar syrup. Gulab jamun are similar to this but are softer in texture and light in colour.

Kheer Kadam

Each Kheer Kadam contain a small rasagulla and sorted by a layer of chenna and powdered khoya.

Kulfi

It is ice cream made of reduced milk and flavoured with cardamom and nuts.

Peda

It is a product of khoya flavoured with essence and decorated with nuts. It is a speciality of UP and Punjab.

Moti Chur Laddu

Laddu made from tinny balls of fried besan mixed with sugar syrup and crushed nuts.

Chandra Kala

A sweet seen of savory samosa; filled with sweetened cream or coconut.

Barfi

Bari is a popular Indian sweet made up of khoya.

Rossogollas

Rossogollas were the invention of Nobin Chandra Das (1868). Rossogollas are famous sweet of Kolkata. It is a chenna based sweet; cooked in one string sugar syrup and served with syrup.

12.4 List of Regional Sweets

North

Name	Image
Balushahi	

Name	Image
Double ka meetha	
Gajar ka Halwa	

Name	Image	Name	Image
Rasgulla		Kulfi	
Gulab Jamun		Motichoor Laddu	
Jalebi		Lassi	
Jhajariya/Imarti		Peda	200
Kalakand		Burfi∣Kaju Katli	
Kheer		Ras malai	
		Singori	

Name	Image
Sohan Halwa	
Bonde	
Ghee-based	

Name	Image
Sohan Papdi/Pateesa	

East

Name	Image	Name	Image
Abar-khabo		Chhena Gaja	
Amriti		Chhena Poda	
Bonde		Cham cham	
		Jal-bhora	

Name	Image	Name	Image
Lyangcha		Sandesh (several types)	
Malapua (dessert)		Shor Bhaja	
Mihidana		Shor Puria	
Pantua		Sitabhog	****
Pithe			
Rasgulla			

South

Name	Image
------	-------

Name	Image
Ada (food)	
Adhirasam	
Ariselu	
Coconut Burfi	
Dharwad pedha	

Name	Image
Double ka meetha	
Jaangiri	
Kozhakkattai	
Mysore pak	
Kuzhi paniyaram	
Obbattu/Holige	

Name	Image
Pootharekulu	
Sheer korma	
Unni appam	
Kashi (food) Halva	

Name	Image
Coconut Laddu	
Neyyapam, Modakam, Ksheera- kesari, Sukiyan, Pazham pori	

West

Name	Image
Shrikhand	
Kaju Katli	
Modak ukkadicha	

Name	Image
Puran Poli	
Dinkache ladoo	Fried dinka, Sugar, Dry fruits, kharik powder,Ghee, Coconut
Sudha ras	Sugar, Water, Lemon,Saffron

12.5 Summary

Mithai vary regionally, and common sweets such as barfi and laddu are available everywhere. Many places have a sweets specialty. In areas such Bengal, the sweet capital of India, towns and villages have their own particular variety. Ingredients and local practices have deep impact on the types of sweets prepared and consumed in the region.

12.6 Review Questions

- Q.1 Write short note on the history of Sweets?
- Q.2 Discuss how regional cooking styles and ingredients have effect on the sweets of that region.
- Q 3. List at least 4 sweets of North and East Regions.
- Q 4. Briefly discuss the following sweets
 - a. Barfi
 - b. Jalebi
 - c. Doodh pak
 - d. Rassolgulla
 - e. Shrikhand

12.7 Suggested Reading

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UNIT 13

FOOD COST CONTROL

Structure

13.0 Objective

- 13.1 Introduction to Cost Control,
- 13.2 Definition Cost Control,
- 13.3 Budgeting
- 13.4 The Objectives and Advantages of Cost Control,
- 13.5 Basic costing,
- 13.6 Food costing
- 13.7 Summary
- 13.8 Question
- 13.9 Reference

13.0 Objective

- Mastery of the concepts and principles of Cost Accounting and their applications in pricing decisions and other control matters in public and private sectors.
- Ability to analyse and predict cost behavioural patterns as output and market factor vary and the impact of patterns on profit and loss.
- Ability to apply appropriate methods and techniques in collecting, measuring and reporting cost information relevant to business and other activities.
- Familiarity with basic concepts and processes in Statistics, Business Mathematics and Operations Research
- Ability to employ suitable mathematical models and techniques to solve problems involving rational choice among alternatives.

13.1 Introduction to Cost Control

The food and beverage business can be characterized as one that involves raw materials purchased, received, stored and issued for the purpose of manufacturing products for sale. In these aspects many similarities exist between the hospitality industry to achieve the goal of profitable operation. This will entail a discussion of how costs and sales are controlled in food and beverage operations. The means employed by foodservice managers to directly, regulate and restrain the actions of people, both directly and indirectly, in order to keep costs within acceptable bounds, to account for revenues properly, and make profits.

13.2 Definition of control:

Control is a process by which a manager attempts to direct, regulate and restrain the action of people in order to achieve the desired goal. An obvious first step is to established goals for the enterprise. Probably the most common goal for all private enterprise is financial success, although this is by no means the only-range goal of business. Others might relate to preserving the environment, promoting better health among the population or etc. To achieve the goals, management must setup any number of sub goals compatible with its long-range plans. These tend to be more specific and usually more immediate in nature. For example, to achieve the goal of preserving the environment, it would be necessary to make rather immediate plans to process or dispose of waste materials in appropriate ways. Two of the principal causes of excessive costs are inefficiency and waste. For example storing food in refrigerators that are not cold enough, or liquor in bottles that are not tightly closed, will lead to spoilage and hence to excessive cost. So will the preparation of an inedible beef stew or an undrinkable martini. When the stew is thrown into the garbage can or the martini poured down the drain, costs of operation are increased but sale are not. Since profit is essentially the difference between sales and costs, it is apparent that any increase in costs that does not lead to corresponding increases in sales can only have the effect of reducing profits. Clearly, management must take steps to guard against the occurrence of these excessive costs.

Sales control:

While cost control is critically important to the profitable operation of any business, it alone will not ensure profitability. Additional steps must be taken to ensure that all sales in appropriate income to the business

Responsibility:

The total responsibility for the operation of any food and beverage enterprise rest ultimately with management.

A number of factors, including nature and scope of operations, will determine the extent to which the management exercise directs control as opposed to delegating responsibility to a subordinate.

In general, the large the operation, the more likely it is that one or more subordinates will supervise and direct control procedures.

The authors will assume the existence of both a food controller and a beverage controller each of who will be responsible for the supervision of all procedures in that single area.

By the same token, we will assume that the manager will personally retain direct control over labor cost

Types of Cost

There are various types of cost which are:

1. Actual Cost

The actual cost is what a cost or expenses actually was. For example, the payroll records and check made out to employees will indicate the actual labor cost for that payroll period.

2. Budgeted Cost

A budgeted cost is what a cost expected to be for a period time. For example, for an anticipated level of sales for a month, we might budget or forecast what the labor cost should be for that period. Later, that budgeted cost would be compared with the actual labor cost in order to determine the causes of any differences.

3. Controllable Cost

A costs that can be changed in the short term. Direct costs are generally more easily controllable than indirect costs. Variable costs are normally controllable. Certain fixed costs are controllable, including advertising, promotions, utilities, repairs, etc.

4. Non-Controllable Cost

Are those costs that cannot be changed in the short term. These are usually fixed costs. These typically include items such rent, depreciation, and taxes.

5. Fixed Cost

Are those that are normally unaffected by changes in sales volume. The term fixed should never be taken to mean unchanging, merely to indicate that any changes that may occur in such costs are related only indirectly to changes in sales volume. Examples: Rent, Utilities,Insurance Premiums

6.Variable Cost

A variable cost is one that varies on a linear basis with revenue. Are those that are clearly related to business volume. Directly variable costs are those that are directly linked to volume of business, such that every increase or decrease in volume brings a corresponding increase or decrease in cost. The obvious variable costs are food and beverage. The more foods and beverage sold, the more that have to be purchased. If revenue is zero, then the cost should also be zero. As business volume increases, so do these costs. As business volume decreases, so do these costs.

7.Direct Cost

Direct cost is a cost that is the responsibility of a particular department or department manager. Most direct costs will go up or down, to a greater or lesser degree, as revenue goes up and down. Because of this, they are considered to be controllable by, and thus the responsibility of, the department to which they are charged. Examples of this type of cost would be food, beverages, wages, operating supplies and services beverages and linen and laundry.

8. Indirect Cost

An indirect cost is commonly referred to as an undistributed cost or one that cannot easily be identified with a particular department or area, and thus cannot be charge to any specific department. For example, property operation, maintenance and energy cost could only be charged to various departments (such as linen or food and beverage) with difficulty. Even if this difficulty could be overcome, it must still be recognized that indirect costs cannot normally be made the responsibility of an operating department manager. Indirect costs are also sometimes referred to as overhead cost.

19.Joint Cost

Is a cost shared by and the responsibility of two or more department or area. The cost of dining room waiter who serves both food and beverage is an example. His labor is a joint cost and should be charged to the food department and to the beverage department. Most indirect costs are also joint costs.

20. Sunk Cost

A cost that has been incurred and cannot be reversed. Also referred to as "stranded cost." A worn-out piece of equipment bought several years ago is a sunk cost because the cost of buying it cannot be reversed.

21. Opportunity Cost

The cost of not doing something or the profit lost. An organization can invest its surplus cash in marketable securities at 10 percent, or leave the money in the bank at 6 percent. If it buys marketable securities, its opportunity cost is 6 percent. Another way to look at it is to say that it is making 10 percent on the investment, less the opportunity cost of 6 percent, therefore the net gain is 4 percent.

22.Standard Cost

A standard cost is what the cost should be for a given volume or level of revenue. For example, a standard cost can be develop by costing the recipe for a given menu item. If ten of these menu items are sold, the total standard cost should be ten item the individual recipe cost. Another illustration would be personnel cost (wages) for cleaning at dining area. If the area attendant is paid RM4.00 an hour, and it takes one half hour to clean the area, the standard labor cost for

cleaning the area would be RM2.00. While, if the service person take 7hours for clean the area, total standard cost would be RM28.

23.Prime Costs

Is a term used in the food and beverage industry to refer to the cost of materials and labour.

Prime Cost = Food Cost + Beverage Cost + Labour Cost

Historical Costs and Planned Costs

Historical costs are figures that have already happened and can be found in the business records.

Planned costs is made by using historical costs in the present to determine what is likely to happen in a future period to come. These numbers are also used in budgeting.

13.3 Budgeting

Budgeting is part of the planning process. It can involve decisions concerning day-to-day management of an operation or, on the other hand, involve plans for as far ahead five years. Budgeting is used by most firms to aid in controlling costs and to ensure that costs are kept in line with forecast revenues. In order to make meaningful decisions about the future, a manager must look ahead. One way to look ahead is to prepare budgets or forecasts. A forecast may be very simple. For a restaurant owner/ operator, a budget may be no more than looking a head to tomorrow, estimating how many customers will eat in the restaurant, and purchasing food and supplies to accommodate this need. On the other hand, in a larger organization, a budget may entail forecasts up to five years ahead (such as for furniture and equipment purchases) as well as day to day budgets (such as staff scheduling). Budgets are not always expressed in monetary terms. They could involve numbers of customers to be served, number of rooms to be occupied, number of employees required or some other unit rather than money. The main purpose of budgeting could be summarized as follows:

i. To provide organized estimates of future revenues and expenses, manpower requirements or equipment needs with estimate broken down by time period and / or department.

ii. To provide a coordinated management policy both short and long term, expressed primarily in accounting terms.

iii. To provide a method of control by comparing actual results with budgeted plans, and to take corrective action if necessary. When are Budgets Prepared? Long range budgets for up to five years forward are generally prepared annually. Each years, such budgets are revised for the next period (up to five years) forward. Short range budgets are prepared annually for the most part, with monthly projections. Each month, budgets for the remaining months of the year should be revised to adjust for any changed circumstances. Departments managers should be involved in such revisions, as well as the budget committee for overall coordination. Weekly or daily short range budgets are usually handled internally by the department heads or other supervisory staff. For example, the housekeeper would arrange the room attendant staffing schedule (which affect

the payroll budget) on a daily basis based on the anticipated rooms occupancy day by day. Types of Budget

There are various types of budgets such as short term or long term, capital, operating, departmental, master and fixed or flexible. In a small operation, budgets can be prepared by an individual. While in the large operation, there would normally be a budget committee. In all cases, whether for a day, a year or some other time period, budgets should be prepared in advance at the start of the period. Advantages and Disadvantages of Budgeting Some of the advantages of budgets are:

i. They involve participation of employees in the planning process, thus improving motivation and communication.

ii. They necessitate, in budget preparation, consideration of alternative courses of action.

iii. They allow a goal, a standard of performance, to be established with subsequent comparison of actual result with that standard.

iv. Flexible budgets permit quick adaptation to unforeseen, changed conditions.

v. They require those involved to be forward looking, rather than to be looking only at past events.

Some of the disadvantages of budgets are:

- i. Time constraints
- ii. Unpredictable future
- iii. Confidential matters
- iv. Spending to budget problem

The Budgeting Cycle has Five Parts

- 1. Establishing attainable goals (remember the limiting factors)
- 2. Planning to achieve these goals
- 3. Analyzing differences between planned and actual results
- 4. Taking any necessary corrective action
- 5. Improving the effectiveness of budgeting

The Purchasing Department

The purchasing department's role is to make sure that supplies, equipment and services are available to the operation in quantities appropriate to predetermined standards, at the right price and at a minimum cost to meet desired standards. Generally, those responsible for purchasing have the authority to commit the establishment's funds to buying required goods or services. By following established purchasing procedures, an operation can avoid many purchasing pitfall

such as panic buying, over or short purchasing, buying by price rather than by a combination of quality and price, pressure buying or what is probably quite common, satisfied buying.

- 1. Recognizing need
- 2. Preparing specifications
- 3. Selecting a supplier
- 4. Ordering the goods or services

5. Receiving the goods or services Ordering Goods The ordering procedure should be similarly formalized with the use of purchase orders.

Three copies of the purchase order are required:

i. For the supplier,

ii. For the person responsible for receiving,

iii. For the accounting office, to be attached to the invoice when it is received for payment.

One question that does arise in the ordering process is the quantity to order. This is often left to the discretion of the department head involved, either because he has authority to order directly what is needed, or because he is in the best position to advise the purchasing department of required quantities. The quality required is not to difficult to determine from past experience. Purchase and Payments Standing Orders One type of standing order would be that a supplier deliver, at an agreed price, a fixed quantity of a specific item each day. Another type of standing order requires the supplier each day to replenish the stock of a certain item up to a predetermined or par level. The par stock level would be established for each item handled this way, according to the needs of the establishment.

E.g.: Par Stock Form Item Par Stock On hand Required Apples, cooking 4 6 10 Apples, baking Apples, crab Apples, table Apricots Bananas

In summary, specifications should include the following items:

The name or description of the item required The specific quantity required The frequency with which the item is required Where it is important, the size, weight, amount or number of the items

required. Where it is important, the form that the items should take (for example, whether an item of food should be fresh, frozen or canned) eg : Prime rib Bone in Oven ready

Grade : USDA choice Upper half

Weight range: 18lb min - 22lb max

Average 20 lb (9kg)

State of refrigeration: Chilled when delivered not previously frozen

Fat limitation: 0.25 - 0.75 inch (average 0.5) on Outside moderate marbling

Color: Light red to slightly dark

Quantity requirement: approximately 300 lb per week The main advantages of specifications are that they: Required those who prepare them to think carefully and document exactly what their product requirements are Leave no doubt in suppliers' minds about what they are quoting on thus reducing or eliminating misunderstanding between supplier and establishment Eliminate, for frequently purchased items, the time that over the telephone or directly to sales persons each time the product is needed Permit competitive bidding Allow the person responsible for receiving to check the quantity of delivered goods against a written description of the quality desired.

13.4 The Objectives and Advantages of Cost Control,

Cost control, also known as cost management or cost containment, is a broad set of cost accounting methods and management techniques with the common goal of improving business cost-efficiency by reducing costs, or at least restricting their rate of growth. Businesses use cost control methods to monitor, evaluate, and ultimately enhance the efficiency of specific areas, such as departments, divisions, or product lines, within their operations. During the 1990s cost control initiatives received paramount attention from corporate America. Often taking the form of corporate restructuring, divestment of peripheral activities, mass layoffs, or outsourcing, cost control strategies were seen as necessary to preserve or boost corporate profits and to maintain or gain a competitive advantage. The objective was often to be the low-cost producer in a given industry, which would typically allow the company to take a greater profit per unit of sales than its competitors at a given price level.

Some cost control proponents believe that such strategic cost-cutting must be planned carefully, as not all cost reduction techniques yield the same benefits. In a notable late 1990s example, chief executive Albert J. Dunlap, nicknamed "Chainsaw Al" because of his penchant for deep cost cutting at the companies he headed, failed to restore the ailing small appliance maker Sunbeam Corporation to profitability despite his drastic cost reduction tactics. Dunlap laid off thousands of workers and sold off business units, but made little contribution to Sunbeam's competitive position or share price in his two years as CEO. Consequently, in 1998 Sunbeam's board fired Dunlap, having lost confidence in his "one-trick" approach to management. Cost Accounting is concerned with cost determination and shows what is likely cost of a process or a

product under existing conditions. Control through costing involves the control over costs in the light of certain predetermined costs usually Known as standard costs. Such standards are set in respect of total costs as a whole and its various components-material, labour and overheads. Thus, standard costs is a technique of Cost Accounting in which standard costs are used in recording certain transactions and the actual costs are compared with the standard costs to find out the reasons of variation from the standard. Essentially control through standard costing involves the following steps:

1. The first step involves the fixation of standards. The standards are fixed for different components of cost separately. Such standards can be laid down on the basis of past records or through experiments also known as engineering methods.

2. The second step consists in determining the actual costs to make a comparative study. This is taken from the cost accounting records.

3. A comparison between standard costs and actual costs is made in order to find the variation between the two. If there is no variation or if it is within prescribed limits, no further action is needed.

4. If the variation is beyond the specified limits, it is taken for further analysis and an attempt is made to locate the reasons for such a variation.

5. In the light of the reasons identified, further course of action is planned so that in future there is no such variation. This may require revision of standards also if they are not realistic.

Advantages of Control through Standard Costing:

Standard costing offers many advantages as follows:

1. Standard costs provide basis for measuring operating performance: As standards are developed from the study of cost operations and existing conditions, they become a pointer to the weaker aspect of operation. The efficiency or inefficiency can be ascertained easily by comparing actual and standard costs.

2. Standard costs provide easy comparability: Because of standards, cost control exercises influence on all the factors of operation. Measurement, comparison, and evaluation of current performance become more effective.

3. Standard costing is basically an economic tool: It helps in cost reduction by putting effective check over inefficiency in operations and by eliminating undue paper work. It suggests standard cost cards and accordingly the needed resources are arranged.

4. Standard costing is a basis for budgeting: Budgets are prepared on the basis of standard costs. Thus, budgeting and standard costing together provide effective control device and make managers cost conscious.

5. Standard costing also provides basis for adopting incentive wage system and bonus plan: Since standard cost is set up from careful analysis and study, it provides basis for work simplification and other methods of standardisation.

Limitations of Control through Costing:

Standard costs have certain disadvantages and limitations as follows:

1. Standard costs are expensive to set up and difficult to operate: Double Accounting record (i.e., financial and cost record) has to be maintained making record-keeping more difficult. Thus, the system is not suitable for smaller organizations.

2. Standard costs need regular revisions: The business conditions keep on changing but standard costs are applicable in a particular condition. As such, standard costs are confined to those organizations which work under more or less stable conditions having standardised mass production.

3. Limitations of budgetary control also apply in the case of cost control: Budgets are made by taking figures of standard costing. Therefore, all the limitations of budgetary control also apply to this method.

13.5 Basic costing,

Manufacturing costing methods are accounting techniques that are used to help understand the value of inputs and outputs in a production process. By tracking and categorizing this information according to a rigorous accounting system, corporate management can determine with a high degree of accuracy the cost per unit of production and other key performance indicators. Management needs this information in order to make informed decisions about production levels, pricing, competitive strategy, future investment, and a host of other concerns. Such information is primarily necessary for internal use, or managerial accounting. In Basic Costing you'll learn how to identify the elements of cost within an organisation (such as materials, labour and overheads), and distinguish the nature and behaviour of particular costs. The nature of costs refers to whether a cost is a fixed, variable or a semi variable cost. Once you can classify costs, you'll learn about how a costing system allows organisations to use information about them. The various uses of cost information include:

- identifying product costs, and as a result being able to set realistic selling prices for items
- valuing stock
- providing information for wider management decision making and monitoring purposes.

Techniques of Costing

Besides the methods of costing, following are the types of costing techniques which are used by management only for controlling costs and making some important managerial decisions. As a

matter of fact, they are not independent methods of cost finding such as job or process costing but are basically costing techniques which can be used as an advantage with any of the methods discussed above.

1. Marginal Costing

Marginal costing is a technique of costing in which allocation of expenditure to production is restricted to those expenses which arise as a result of production, e.g., materials, labor, direct expenses and variable overheads. Fixed overheads are excluded in cases where production varies because it may give misleading results. The technique is useful in manufacturing industries with varying levels of output.

2. Direct Costing

The practice of charging all direct costs to operations, processes or products and leaving all indirect costs to be written off against profits in the period in which they arise is termed as direct costing. The technique differs from marginal costing because some fixed costs can be considered as direct costs in appropriate circumstances.

3. Absorption or Full Costing

The practice of charging all costs both variable and fixed to operations, products or processes is termed as absorption costing.

4. Uniform Costing

A technique where standardized principles and methods of cost accounting are employed by a number of different companies and firms is termed as uniform costing. Standardization may extend to the methods of costing, accounting classification including codes, methods of defining costs and charging depreciation, methods of allocating or apportioning overheads to cost centers or cost units. The system, thus, facilitates inter- firm comparisons, establishment of realistic pricing policies, etc.

Systems of Costing

It has already been stated that there are two main methods used to determine costs. These are:

• Job cost method • Process cost method

It is possible to ascertain the costs under each of the above methods by two different ways:

- Historical costing
- Standard costing

Historical costing can be of the following two types in nature:

- Post costing
- Continuous costing

Post Costing

Post costing means ascertainment of cost after the production is completed. This is done by analyzing the financial accounts at the end of a period in such a way so as to disclose the cost of the units which have been produced. For instance, if the cost of product A is to be calculated on this basis, one will have to wait till the materials are actually purchased and used, labor actually paid and overhead expenditure actually incurred. This system is used only for ascertaining the costs but not useful for exercising any control over costs, as one comes to know of things after they had taken place. It can serve as guidance for future production only when conditions in future continue to be the same.

Continuous Costing

In case of this method, cost is ascertained as soon as a job is completed or even when a job is in progress. This is done usually before a job is over or product is made. In the process, actual expenditure on materials and wages and share of overheads are also estimated. Hence, the figure of cost ascertained in this case is not exact. But it has an advantage of providing cost information to the management promptly, thereby enabling it to take necessary corrective action on time. However, it neither provides any standard for judging current efficiency nor does it disclose what the cost of a job ought to have been.

Standard Costing

Standard costing is a system under which the cost of a product is determined in advance on certain pre-determined standards. With reference to the example given in post costing, the cost of product A can be calculated in advance if one is in a position to estimate in advance the material labor and overheads that should be incurred over the product. All this requires an efficient system of cost accounting. However, this system will not be useful if a vigorous system of controlling costs and standard costs are not in force. Standard costing is becoming more and more popular nowadays.

13.6 Food costing

Food cost refers to the menu price of a certain dish in comparison to the cost of the food used to prepare that same dish. In other words, how much you pay for food will determine how much you need to charge for it. Generally, food cost should be around 30-35%. This means that if you pay \$1.00 for something, you need to charge minimum of \$3.34. It may seem like you are charging a lot more than necessary, but keep in mind that you aren't just paying for the food itself.

Portion Control

One reason that chain restaurants are so successful is that they have a firm handle on portion control. The cooks in those restaurants know exactly how much of each ingredient to put in every dish. For example, shrimp scampi may have a portion control of six shrimp per dish.

Therefore, every shrimp scampi that goes out of that kitchen will have six shrimp in it, no more, no less. This is portion control.

13.7 Summary

Cost Control of the business entity, then, is essentially a managerial and supervisory function. Cost Control consists of those actions necessary to assure that the entity's resources and operations are focused on attaining established objectives, goals and plans. Cost Control, exercised continuously, flags potential problems so that crises may be prevented. It also standardizes the quality and quantity of output, and provides managers with objective information about employee performance. Management compares actual performance to predetermined standards and takes action when necessary to correct variances from the standards.

13.8 Question

- 1. Write the definition of food cost control?
- 2. How you manage cost control of food product in your restaurant
- 3. What is Portion Control?
- 4. What is the Techniques of costing?
- 5. What is the limitations of Control through Costing?
- 6.What is budgeting?

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UNIT 14

FOOD CONTROL CYCLE -1

Structure

- 14.0 Objective
- 14.1 Introduction
- 14.2 Purchasing Control,
- 14.3 Aims of Purchasing Policy,
- 14.4 Job Description of Purchase
- 14.5 Manager/Personnel,
- 14.6 Types of Food Purchase,
- 14.7 Quality Purchasing,
- 14.8 Food Quality Factors for different commodities
- 14.9 commodities
- 14.10 Definition of Yield,
- 14.11 Tests to arrive at standard yield,
- 14.12 Definition of Standard Purchase
- 14.13 Specification, Advantages of Standard Yield
- 14.14 Yield and Standard Purchase Specification, Specification,
- 14.15 Question
- 14.16 Reference

14.0 Objective

- To purchase the required material at minimum possible price by following the company policies.
- To keep department expenses low.
- Development of good & new vendors (suppliers).
- Development of good relation with the existing suppliers.
- Training & development of personal employees in department.
- To maintain proper & up to date records of all transactions.

• Participating in development of new material and products.

14.1 Introduction

The motive of a Restaurant / hotel is to make reasonable profit at the end of the day. To make profit, it is not only that the sale is to be increased but the cost / total cost of the product is also to be controlled without affecting the portion of the dish or without deteriorating the quality of the dish.

At all levels, from purchasing, receiving, storing, issuing, production (cooking) and sale, the cost have to be controlled. At any level if the cost is not controlled than the restaurant / hotel will not make profit in spite of having a very good sale.

The purchase department must ensure that the right quality of food, at competitive price and right quantity of raw material should be procured to keep the cost control. The raw material received by stores must be inspected for the quality and the quantity desired, and in case it is not found up to requirement, it should be returned to the supplier for replacement. All raw material received must be stored at a proper place. It is saying that in stores there should be, 'a place for everything and everything is place'. The store keeper must ensure that no food item should get spoiled and if it happens then it is charged to store keeper. All raw material received must be stored properly in the stores department attached to the receiving department. In some hotels the perishable items are received in consultation with the Chef or the head of other department who ordered the material. The department who ordered is asked to take the delivery and shift the material to their department. All goods should be issued after a proper requisition. The store keeper must follow the rule of 'FIRST IN FIRST OUT (F.I.F.O.), which means the goods received first are issued first. The chef must ensure that the standard recipe is strictly followed in kitchens. The dishes served must have the similar presentation with identical accompaniments at all times. In case the cooked food is left at the end of the day then it must be stored at a proper temperature so that it can be used on the following day, if so required. Chefs can Re-Chafe the dishes to give a fresh look and better presentable. The cooks must ensure that there should be as far as possible no spoilage of food in the kitchen. n case food is allowed to be picked up without proper bill then this will increase the food cost.

To have a better cost control cycle there are other numerous factors apart from above mentioned points which affect the cost control and these are:

a) POLICY: Policy of purchasing, menu finalisation, interior decoration of the restaurant, etc. should be as per the market requirement. There is no need to design or plan menu which people, at large, do not relish. For example, planning a Thai Menu for a small restaurant where guests do not have the liking of Thai Menu.

b) MENU: Keeping in view the menu / dish, the quantity of raw material should be ordered. For example, for soups one may order for small sized but red coloured tomatoes but for salads tomatoes should be red, large and round. c) VOLUME: If possible, large volume of raw material should be purchased as the bulk purchasing will be always cheaper. But the large quantity should only be bought if it can be used without losing the quality of the raw material.

14.2 Purchasing Control

Purchasing involves acquiring materials of right quality, at the right quantity, at right time from a right source and at a reasonable price. A separate purchase department should be established to perform purchasing activities. The size of purchasing department depends upon the quantity to be purchased by the company. The purchase department determine the quality, quantity, items, price and time of purchase of materials. The function of purchase department is to purchase materials, supplies , machines and tools at the most favourable terms and conditions in a way that helps maintain the quality. It is an important function of material management and control.

Concept and Meaning of Purchase Control

A manufacturing company is required to invest a huge amount of money in purchasing materials. It is, therefore, essential to exercise a proper material and purchase control. Purchase control refers to the purchase of materials of right quality in a right quantity at a reasonable price and at a right time. It requires a good amount of attention to the purchasing procedures of materials relating to cost, quality, volume, time, and delivery of materials. Purchase control starts with the issue of materials requisition and ends with the receipt of materials and payment of the cost of the materials.

14.3 Aims of Purchasing Policy,

The organisation's purchasing policy exists for a number of discrete but often interconnected purposes. The policy commits the organisation, and every individual involved in purchasing and supply management processes within the organisation, to use their best endeavours to ensure that our purchasing and contracting activities are:

- 1. Legal
- 2. Accountable and Auditable
- 3. Ethically, Environmentally and Socially responsible
- 4. Conducive to maintaining the organisation's ability to expolit appropriate technological, commercial and organisational developments as the arise
- 5. Capable of identifying, minimising and managing risks that may threaten the supply chain or the wider organisation.
- 6. Open to continuous improvement and development, in particular by training, development and support of staff.

- 7. In addition it is the purchasing department's aim that, as far as is with in their power, it will only employ suppliers and contractors who subscribe to and operate on similar principles.
- 8. Joint venture partners, and the management of outsourced activities on an organisation's behalf, are similarly expected to abide by and promote these principles.

14.4 Job Description of Purchase

Purchasing managers are responsible for buying the best quality equipment, goods and services for a company or organisation at the most competitive prices. They work in a wide range of sectors for many different organisations. The purchasing manager oversees supply chain management and procurement, possibly on a worldwide scale. They need to be good at negotiating, networking and dealing with numbers, as well as dealing with other factors such as sustainability, risk management and ethical issues. Purchasing and supply management is an important role for any business or organisation. More than two thirds of revenue can be spent on buying the company's products or services, meaning the purchasing manager can make a real difference in cost saving and profit.

Typical work activities

The duties carried out by a purchasing manager depend largely on the business functions, size and location of the employing organisation. The level of responsibility held by the purchasing manager will also influence responsibilities. Tasks typically involve: forecasting levels of demand for services and products to meet the business needs and keeping a constant check on stock levels; conducting research to ascertain the best products and suppliers in terms of best value, delivery schedules and quality; liaising between suppliers, manufacturers, relevant internal departments and customers; identifying potential suppliers, visiting existing suppliers, and building and maintaining good relationships with them; negotiating and agreeing contracts and monitoring their progress, checking the quality of service provided; processing payments and invoices; keeping contract files and using them as reference for the future; forecasting price trends and their impact on future activities; giving presentations about market analysis and possible growth; developing an organisation's purchasing strategy; producing reports and statistics using computer software; evaluating bids and making recommendations based on commercial and technical factors; ensuring suppliers are aware of business objectives;attending meetings and trade conferences; training and supervising the work of other members of staff.

14.5 Manager/Personnel

A personal manager advises and counsels talent and personalities in the entertainment industry. Personal managers have the expertise to find and develop new talent and create opportunities for those artists which they represent. Personal managers act as liaison between their clients and the talent agents, publicists, attorneys, business managers, and other entertainment industry professionals which provide services to the personal manager's

clients.Imagine a wagon wheel. At the very center is the axle. The axle is the performing artist around which everything revolves. The hub protects and supports the axle. That is the personal manager. The rim of the wheel is the artist's career which travels on what can often be a bumpy, long, winding road. Connecting the hub with the rim are many spokes which give the wheel support in different directions. These are the agents, publicists, attorneys, business managers, and other industry professionals which support an artist on the road to success. When the wheel is well constructed, the artist's journey can be smooth, speedy and successful.Similar to a corporate chief executive officer, a personal manager is responsible for everything and anything that enhances the development of a performing artist's career. From simple staging suggestions, to complex negotiations, to long term career plans, a personal manager lives the artist's career every day behind the scenes. The manager's commitment to and involvement in the artist's career is one hundred per cent. The personal manager is the driving force breaking through the barriers of frustration and difficulty so often encountered in the entertainment industry. A personal manager is the person who believes in and keeps fighting for a client when all others have given up.

With responsibilities like that, it is a prerequisite that a personal manager must have the broadest of experience in the entertainment industry. Professional personal managers are also well informed on industry practices, standards, and regulations. Plus, managers are alert to the constant changes affecting the entertainment industry. Only with experience and up to date knowledge can a personal manager benefit clients.

14.6 Types of Food Purchase

Food is any substance consumed to provide nutritional support for the body. It is usually of plant or animal origin, essential nutrients. and contains such as carbohydrates, fats, proteins, vitamins, or minerals. The substance is ingested by an organism and assimilated by the organism's cells in an effort to produce energy, maintain life, or stimulate growth. Historically, people secured food through two methods: hunting and gathering, and agriculture. Today, most of the food energyrequired by the ever increasing population of the World is supplied by the food industry. Food safety and food security are monitored by agencies like the International Association for Food Protection, World Resources Institute, World Food Programme, Food and Agriculture Organization, and International Food Information Council. address issues such Thev as sustainability, biological diversity, climate change, nutritional economics, population growth, water supply, and access to food. The right to food is a human right derived from the International Covenant on Economic, Social and Cultural Rights (ICESCR), recognizing the "right to an adequate standard of living, including adequate food," as well as the "fundamental right to be free from hunger." The types of food you select depends on: the money you have your nutritional needs and the effect of advertisements Now let us examine each of these factors and see how they influence our selection or choice of food. The money you have The more money you have the more foods you can buy and the greater your choice. People who have a lot of money can afford a variety of meals and can eat away from home. People with small incomes have a limited choice and it becomes a hard task to buy enough food to meet family needs. If you have a limited food budget, you can save money by buying foods that in season and buying cheaper cuts of meat as well as comparing prices in different shops.

Likes and dislikes

You eat to keep alive and healthy. At the same time most people also eat to enjoy the food. People tend to eat foods they like and avoid those they dislike. Is there any food you dislike? Why do you dislike it? Is this food very nutritious?

Foods are normally disliked because:-

Of their colour, flavour and texture They are new and have never been tried They do not look attractive The food is associated with some ill feeling The way it is cooked is not appealing Food is enjoyed when it is liked. Food is enjoyed because it provides some sensations for you the aromas and flavours that come from food are detected by special nerves in the sense organs of taste and smell. Sight and temperature also have a great effect on the enjoyment of food. Cooking food often develops the flavour and changes the texture of food. Many foods are traditionally eaten hot or cold. If food is too hot or too cold it true flavour may be masked and it may be uncomfortable to eat.

Advertisements

Another great influence on food choice is advertisement. Advertisements have a way of persuading people to make choices. Food manufacturers and shops advertise their products through television, radio, magazines, newspapers, posters and leaflets. Good adverts are decent, honest and truthful. They do not mislead the public about a product. They show a sense of responsibility to people. They conform to fair competition behaviour different manufacturers and businesses. Nutritional needs Your food choice will also depend on your need for food. Everyone has a biological need for food. It is essential for life without food one becomes weak and ill. People vary in the amount of food they need for reasons like health, age and activity. Your choice of food will therefore depend on each of these factors. Your nutrition knowledge helps you to choose food that provides the necessary nutrients to meet your needs.

Food Purchasing

Food purchasing can be a boring or interesting adventure depending on one's approach to it. To make food purchasing interesting you have to know much about the market place and ways in which you can make the most out of your food budget. Now let us look at some of the things you can do to avoid waste of your time and money when purchasing food. First of all you need to know the factors that determine the cost of the things you want to purchase. Production cost The season The market supply of the goods The demand of the goods Advertisements Amount of processing Can you explain how each of these affects the cost of the things you buy? Now read the following explanations.

Production cost

This is the amount of money used to produce the item. In the case of food, the production cost will include the money spent on cleaning the land, sowing the seeds, harvesting and processing. The final cost of a product is determined by this amount plus others like transportation cost, profit and handling charges.

The season

Seasonal differences in the cost of food occur frequently in Ghana. Food items always cost less when they are in season because they are plenty and so the supply becomes high. When market supply of a commodity becomes high the price of the commodity falls. Food items that are out of season become scarce and therefore their prices are higher.

Demand for item

Usually when many people want a certain item, its price increases.

Advertisements

These are ways in which manufacturers and sellers tell us they have certain goods and services for sale. Advertisements cost money. The cost of advertising a product is added to the production cost to make up the price of a product. The more the advertisement the higher the cost of the product.

Amount of processing

Processing adds value to products and it costs money. Foods that are processed to provide conveniences cost more than unprocessed ones.

Do you now see why these factors affect the cost of products? Having learnt about these factors how you would buy your commodities so that you do not spend too much money.

Factors that determine the amount of money we spend on food.

For most people food budget is one of the largest expenses. Careful planning and shopping can result in substantial savings. Normally if you are rich you tend to spend more money on food and if you are poor you spend less.

Your skills personal preferences, Your values and your lifestyle will all determine your food selection and hence the money you spend buying food. The skill of bargaining for example would help you to buy goods at the cheapest possible cost. Buying foods in season and in bulk also helps to cut down cost. Buying food from farm gates instead of from retailers also cuts cost. When you buy food, buy them from places where prices are lower and where food sold is of good quality. Buy food from places that are clean and where food is well stored.

Forms in which food is sold

Foods are sold in many forms. The form you buy is determined by the storage facilities you have, how much convenience you need and what you want to use the food for. Foods are sold fresh, dried, frozen or canned.

Fresh foods

Fresh foods provide most nutrients since processing may destroy the nutrients. Fresh foods are natural and do not require fortification or processing. They therefore cost less. How ever, because they are fresh they spoil fast.

Frozen foods

Frozen foods are much nearer to fresh foods as far as nutrient content is concerned. Freezing prevents the action of enzymes and microorganisms. Microorganisms are minute organisms which we can not see but which can be very harmful to us and can spoil our food. Frozen foods must be stored in the freezer in useable quantities. Remember that when you thaw a frozen food completely it must be used immediately to avoid spoilage. Thawed foods should not be refrozen.

Dried foods

Dried foods have their moisture removed. Some dried foods like milk powder, can be reconstituted by adding water. Dried foods do not require refrigeration. They are light in weight and take up les storage space.

Canned foods

Canned foods are convenient to use. They will not spoil as long as the can is not punched. Canned foods should be stored in cool dry places. They do not have the taste of freshly cooked foods. They are much more expensive than foods in other forms. They have long shelf life that is they last longer. Unless canned foods are fortified with nutrients they loose most of their nutrient content.

14.7 Quality Purchasing

Quality is an important part of the supply chain, whether it is quality inspections during the manufacturing process, quality checks before goods arrive at the customer, or checking qualityas raw materials and parts enter the factory. Before any part or raw material is used in a manufacturer of a finished good that will be delivered to a customer, it is the responsibility of the purchasing department to ensure that the materials that arrive are of the correct quality specification.

Quality in the Purchasing Process

When the purchasing department are looking at the procurement of materials from suppliers they will have been given some guidance by themanufacturing department, research and development, or the quality department. This should include a variety of information about the item to be sourced, such as physical description, dimensional measurements, chemical

composition, performance specifications, standards to conform to, or even the brand name of the product.

Physical Description – the purchasing department must know the physical attributes of the part they are required to source. For example, if the required material must be made of a certain shade of a blue, then the purchasing department must be able to communicate that requirement to the potential suppliers to ensure that the specification can be met.

Chemical Composition – this is very important for sourced materials that are used in the chemical process. The quality department should give the purchasing team a detailed list of chemical specifications of the required material. This should include a list of characteristics and specifications that the materials should conform to, as well as the ranges that the materials must lie within. For example, a sourced chemical may be required to have a pH of between 5.6 and 5.9; otherwise the material would not be suitable for the manufacturing processes.

Dimensional Measurements – for a part to be used in the manufacturer of a machine the part must conform to certain dimensional specifications. For example, if the manufacture of a finished item required the use of a Pentalobe TS1 screw with a length of 4mm, then the supplier must be able to produce the item in that correct size.

Performance Specifications – if a part is required to withstand certain forces or perform in a particular manner, the purchasing department must find a supplier that can achieve those specifications. For example, on a household item such as washing machine, the rubber belt that is used must be bale to withstand certain forces and not fail within a certain number of revolutions. This quality measurement is key for a business if they are to produce finished goods that are reliable in the eyes of their customers. Therefore it is important for the purchasing department to find suppliers who can provide parts that meet quality specifications.

Industrial Standards – some parts required in the production of finished goods must conform to certain industry standards. These standards are set by a number of trade or industry groups who try to maintain a certain level of quality. By having an item that conforms to a particular industry standard, the customer will have a level of confidence in the product. There are a number of industry standards that are used, such as Society of Automotive Engineers (SAE), which is a global association of more than 128,000 engineers and related technical experts in the aerospace, automotive and commercial-vehicle industries. The society has hundreds of standards that relate to different technical aspects of manufacturing.

Brand Name – sometimes the quality department or development team will inform the purchasing department to only source a particular brand name. This may be due to the specific nature of the part made by one company or the level of quality it has over competitors.

14.8 Food Quality Factors for different commodities

To stay healthy, it is important to eat high-quality food. High-quality foods are often determined by their freshness, nutritional value and cleanliness. These foods also tend to be more delicious

than their low-quality counterparts, keeping you and your family happy at the dinner table. To stay strong, energized and fit, consider the quality of the food you purchase and consume each day.

Weather

Weather plays a large role in the quality of the foods we eat. When temperatures are too high, fruits may spoil and rot. Sudden heat waves can "stress" plants like tomatoes and affect their taste and firmness. Likewise, unexpected cold weather can damage fruits and vegetables, causing these plants to die before harvest time. Moreover, drought or flooding can also cause poor food quality, damaging produce in flavor, texture and color. According to U.S. News and World Report, sudden floods in the Midwest ruined 1.3 million acres of corn, resulting in poor crops, low sales and high prices. For meats, inclement weather can also have an important effect. Storms or hurricanes can impede the ability to care and feed for livestock, as well as cause stress and illness among the animals.

Storage

One of the most significant factors that affect the quality of food is storage. Making sure to store food correctly and adequately is key. If food is kept in poor storage conditions such as hot temperatures, food will lose its nutritional value or spoil. To keep foods healthy and delicious, be sure to use fresh produce and meats as soon as possible. Store bulk items in a refrigerator to keep them fresh. Since each item of food has a different period of freshness, be sure to check how long you can store them. Storing food for too long in a refrigerator can still cause decay or diminish the nutritional value. If you do not plan to use your meats, vegetables, breads or fruits soon, consider freezing them. Freezing foods in a timely matter can retain some of the food's original quality. According to the U.S. Department of Agriculture, freezing foods at their peak quality will taste better and fresher than foods frozen near the end of their usefulness.

Harvesting

Harvesting can also affect food quality. For instance, when fruits and vegetables are harvested too late or too early in the season, overall taste, texture, and color may be compromised. The amount of time between harvesting and delivery to a market also can damage the quality of the fruit or vegetable. A delay in exportation yields a risk of decay before it even reaches store shelves. If fresh produce isn't processed quickly, it may also lose nutritional value. Whenever possible, consider buying fresh, local foods. Since these foods are local, the time between harvesting and purchasing is cut down significantly.

14.9 Commodities

In economics, a commodity is a marketable item produced to satisfy wants or needs. Economic commodities comprise goods and services. The exact definition of the term commodity is specifically used to describe a class of goods for which there demand is, but which is supplied without qualitative differentiation across a market. A commodity has full or partial fungibility;

that is, the market treats its instances as equivalent or nearly so with no regard to who produced them. As the saying goes, "From the taste of wheat it is not possible to tell who produced it, a Russian serf, a French peasant or an English capitalist." Petroleum and copper are other examples of such commodities, their supply and demand being a part of one universal market. Items such as stereo systems, on the other hand, have many aspects of product differentiation, such as the brand, the user interface and the perceived quality. The demand for one type of stereo may be much larger than demand for another.

In contrast, one of the characteristics of a commodity good is that its price is determined as a function of its market as a whole. Well-established physical commodities have actively traded spot and derivative markets. Generally, these are basic resources and agricultural products such as iron ore, crude oil, coal, salt, sugar, tea, coffee beans, soybeans, aluminum, copper, rice, wheat, gold, silver, palladium, and platinum. Soft commodities are goods that are grown, while hard commodities are ones that are extracted through mining.

There is another important class of energy commodities which includes electricity, gas, coal and oil. Electricity has the particular characteristic that it is usually uneconomical to store; hence, electricity must be consumed as soon as it is produced.

Commoditization occurs as a goods or services market loses differentiation across its supply base, often by the diffusion of the intellectual capital necessary to acquire or produce it efficiently. As such, goods that formerly carried premium margins for market participants have become commodities, such as generic pharmaceuticals and DRAM chips. The multivitamin supplements as an example of commoditization; a 50 mg tablet of calcium is of equal value to a consumer no matter what company produces and markets it, and as such, multivitamins are now sold in bulk and are available at any supermarket with little brand differentiation. Following this trend, nanomaterialsare emerging from carrying premium profit margins for market participants to a status of commoditisation.

There is a spectrum of commoditization, rather than a binary distinction of "commodity versus differentiable product". Few products have complete undifferentiability and hence fungibility; even electricity can be differentiated in the market based on its method of generation (e.g., fossil fuel, wind, solar), in markets where energy choice lets a buyer pay more for renewable methods if desired. Many products' degree of commoditization depends on the buyer's mentality and means. For example, milk, eggs, and notebook paper are considered by many customers as completely undifferentiable and fungible; lowest price is the only deciding factor in the purchasing choice. Other customers take into consideration other factors besides price, such as environmental sustainability and animal welfare. To these customers, distinctions such as "organic versus not" or "cage freeversus not" count toward differentiating brands of milk or eggs, and percentage of recycled content or Forest Stewardship Council certification count toward differentiating brands of notebook paper.

14.10 Definition of Yield
In finance, the term yield describes the amount in cash (in percent terms) that returns to the owners of a security. Normally, it does not include the price variations, at the difference of the total return. Yield applies to various stated rates of return on stocks (common and preferred, and convertible), fixed income instruments (bonds, notes, bills, strips, zero coupon), and some other investment type insurance products (e.g. annuities).

The term is used in different situations to mean different things. It can be calculated as a ratio or as an internal rate of return (IRR). It may be used to state the owner's total return, or just a portion of income, or exceed the income. Because of these differences, the yields from different uses should never be compared as if they were equal.

1. The annual rate of return on an investment, expressed as a percentage.

2. For bonds and notes, the coupon rate divided by the market price. This is not an accurate measure of total return, since it does not factor in capital gains.

3. For securities, the annual dividends divided by the purchase price. This is not an accurate measure of total return, since it does not factor in capital gains. here, also called dividend yield or current yield.

14.11 Tests to arrive at standard yield

A yield test is performed on each item with respect to the product .A yield test is a process in which raw product purchased in an "As Purchased form is broken down into edible product and waste. As Purchased is defined as the form of the purchased product that needs some preparation before it is ready to be served in its edible portion form. The preparation needed is usually that of trimming waste from the product and separating it from the usable product. Although yield tests are usually performed on raw product, they may also beused on prepared products. A cooking loss test, which is a similar method of breaking product into edible product and waste, is used to determine the "Standard Portion Cost" of products that need to be cooked before portioning. The purpose of a yield test is to determine the yield, the cost per pound, and the cost per portion of a product purchased in an "As Purchased" form. A yield test can be performed on a variety of food and beverage items: fresh produce (a case of green beans), poultry (a turkey), seafood or meat (a10 lb. beef tenderloin), as well as canned (#10 can chopped tomatoes), bottled(14 oz. artichoke hearts), and frozen items (5 gallons ice cream) that have been prepared prior to purchasing. Many of these products are not 100% usable as they include some waste. The purpose of the yield test is to break down the product into useable product and non-usable waste

14.12 Definition of Standard Purchase Specification

A purchase specification is a concise description of the quality, size, weight, count and other factors needed to describe a desired item. The specified factors should be described in sufficient detail to properly guide the company's supplier and receiving personnel in the delivery and receipt of the products. Management should establish standard purchase specification based on

menu requirements and operations merchandising and pricing policies. Once developed, standard specifications should be given to those responsible for purchasing, as well as to the suppliers and this way all those involved in the purchase cycle are made aware of the required standard of quality desired. Besides making clear what is required to all concerned, SPS also has other advantages.

1. Fewer products may be required. Two different sizes of shrimp could eliminated and one standard size used for a shrimp salad and a shrimp curry.

2. Reduced purchase costs may be possible. Purchase specification based on the needs of the menu will keep the company from purchasing higher quality products than it needs for its purposes. Firm, Red, Ripe tomatoes are good for a salad but a cheaper variety of probably slightly texture would be good enough for a soup or a tomato based Indian gravy.

3. If purchase specifications are clearly mentioned, more than one supplier will quote for the order making the business more competitive.

The development and use of standard purchase specifications involves time and effort. However, considering the many advantages that purchase specifications offer relative to the few disadvantages, they are clearly a critical standard cost control tool. Carefully developed and rigidly enforced specifications help the operation ensure that the right quality product is consistently available for production and service. Remember, however, that standard purchase specifications call for effective receiving and control procedures to be effective.

14.13 Advantages of Standard Yield

The use of yield management as part of your business philosophy can help ensure your company gets the most possible money out of the sale of limited or perishable goods. Properly segmenting the audience who will purchase these commodities can achieve this goal of high profits. There are a number of benefits you can enjoy if you link your promotional efforts to your yield management strategies. Chief among these advantages is that you'll do a better job of matching your customers to the highest price they will pay for your merchandise.

14.14 Standard Purchase Specification, Specification

Written guidelines that precisely define the operational, physical, and/or chemical characteristics, as well as the quality and quantity of a particular item to be acquired. Precisely defined specification, established through a standardization process and meant to be used for all purchases of a particular item. Public procurement should understand the elements required to accurately define, represent and fully express the requirements of the requestor and should recognize that a specification may form a part of a wider description of requirements. The statement of requirements must establish an accurate description of the need so that the potential suppliers can provide acceptable solutions.

Definition

Specification's A precise description of the physical or functional characteristics of a product, service or combination; n A description of what the purchaser seeks to buy and what a bidder must respond to in order to be considered for award of a contract. Specifications generally fall under the following categories: design, performance, combination (design and performance), brand name or approved equal, qualified products list and samples. Specifications may also be known as a purchasing description

14.15 Question

- 1. Define the Purchasing Control?
- 2. Write the Aims of Purchasing Policy?
- 3. What is the Job Description of Purchase?
- 4. Write the quality of Manager/Personnel?
- 5. How many types of Food Purchase?
- 6. What is the Quality Purchasing?
- 7. What is the Food Quality Factors for different commodities?
- 8. Specification

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UNIT 15

FOOD COST CONTROL CYCLE -2

Structure

15.0 Objective

- 15.1 Introduction
 - 15.1.1 Invoice Receiving Method
 - 15.1.2 Blind Receiving Method
 - 15.1.3 Partially Blind Receiving Method
 - 15.1.4 Mechanism of Receiving

15.2 Purchasing

- 15.3 Purchase Specifications
 - 15.3.1 Standard Purchase Specifications
 - 15.3.2 The preparation of Standard Purchase Specifications
- 15.4 Clerical Procedures and Forms Used.
- 15.5 Determination of economic ordering quantity
- 15.6 Planning and evaluation of food production
 - 15.6.1 Volume forecasting / production planning
 - 15.6.2 Standard yields
- 15.7 Standard Recipes
- 15.8 Materials requirement planning
- 15.9 Summary
- 15.10 Self Assessment Test
- 15.11 Further Reading

15.1 Introduction

Efficient Food Purchasing methods demand good receiving procedures in order for the system to work. The rupees saved by careful food purchasing may be lost quickly by inefficient receiving practices. In many operations, purchasing and receiving are controlled by single department so that both this importance functions can be coordinated. The ideal situation would be that the person(s) who place the orders be responsible for the receiving and checking, but this is not

practical in larger operations. The receiving operations should be handled by competent and knowledgeable persons. The link between purchasing and receiving is very critical for the functioning of the entire system and is an excellent example of how various sub systems are interdependent on each other. The functions of receiving department and therefore the responsibilities of the person(s) incharge are as follows:

- 1. Receiving personal should be aware of the commodities ordered and when they are expected to be delivered. In many operations a copy of the purchase order is send to the receiving department.
- 2. Inspection and receiving procedures should be completed in a reasonable amount of time. This is important for the person receiving the merchandise as well as for the delivery person.
- 3. Person(s) incharge of purchasing should have experience in checking and should know relevant testing procedures. Materials and methods used for testing should be readily accessible to the receiving person.
- 4. Receiving personnel should follow good sanitary practices in handling foods so that any chances of contamination or spoilage are avoided.
- 5. Receiving personnel should know the time and temperatures at which different products may be stored. They should also know the shelf life of various commodities. It is advisable to have this information on wall charts and on other easily understood illustrations.
- 6. Receivers should also be aware of specifications, descriptions of terms, weights and measures, and possible use of the products. Instructions should be given to those in charge of receiving that these specifications should be adhered to rigidly.

There are several receiving methods and management should be aware of the receiving methods and practices. Receiving methods can primarily be divided into three types: (1) invoice, (2) blind, and (3) partially blind.

15.1.1 Invoice Receiving Method

In this method, an invoice accompanies the shipment. An "invoice" is a slip or form that accompanies an order, which is prepared and delivered by the vendor or his agent. In this method of receiving: the invoice is checked against the delivered merchandise. The specifications, quantities, prices, and other details are listed on the invoice. The person receiving the goods should verify these particulars against the items received. This is a relatively simple and rapid way of checking. If properly administered, this method ensures the quality and quantity of the goods delivered.

The disadvantages of invoice receiving include the chances of negligent practices being followed by the receiving person either intentionally or unintentionally, Forced by the pressure of checking deliveries, the receiving clerk may glance through the invoice and accept it. This practice may also encourage the delivery person or the vendor toward undesirable practices.

15.1.2 Blind Receiving Method

In order to overcome some of the disadvantages of the invoice receiving method, Wind receiving may be followed. In this method a blank invoice or an invoice with only the list of items being delivered is sent. The quantity, quality, and other characteristics are excluded. This makes it essential for the receiving person to check and fill in this information in order to complete the/receiving process. Thus the quality and the quantity of she delivered goods are checked and recorded by the receiving person. A separate invoice with all details is sent directly to the person in charge of purchasing. For the sake of convenience many vendors print the copies of the invoice in such a way that certain information is blacked out in selected copies. This is a very rigid and accurate method of ensuring the quality and quantity of the goods received. When the copy of the invoice, checked and filled in by the receiving department, is received by the purchasing department, it is checked against the complete invoice sent by the vendor. Any discrepancies are reported directly by the purchasing department to the vendor or the receiving clerk. This method demands sincerity from all concerned parties. However, the time and cost involved may be considerable and prove to be the major disadvantage of this method It requires the time of the receiving personnel, as well as additional work for the purchasing department. This method should be followed after careful assessment of the costs and benefits involved.

15.1.3 Partially Blind Receiving Method

This method combines some of the advantages of the earlier two methods and eliminates some of the drawbacks of the blind receiving procedure. The invoice sent with the delivery contains partial information only. The list of items is included with all pertinent information except quantities. This makes it necessary to check the quantities while receiving. The quantity of the goods received is the most important factor in receiving, which is checked and recorded in this method. This saves a considerable amount of time. In this method partially blackened-out invoices may also be used. When blind or partially blind receiving methods are followed, it is essential that the management informs the vendors (hat completely filled-in invoices should be sent separately and should not accompany the deliveries.

15.1.4 Mechanism of Receiving

The mechanism of receiving is outlined in the following steps:

- 1. When the shipment is received, a proper invoice or delivery sheet should be used for verification and checking.
- 2. All merchandise should be carefully checked for the following aspects pertaining to the quantity of the delivered goods;
 - a. Each container should be clerked carefully for any sib1llS of external damage. Any signs of damage, leakage, improper packaging, or breakage are indicative of poor

packaging and delivery practices, and all such packages should be opened and carefully checked to ensure the quantity and the quality of the merchandise.

- b. Each item should be weighed and/or counted, checked, and recorded properly. Any shortages or overages should also be recorded against the item. It is advisable to check and record each item separately. The quantity indicated on the label should be checked, particularly for any open packages.
- c. For some products it may be necessary to calculate the quantities after weighing, as in the case of eggs and baked goods. Appropriate conversion tables should be readily available or prominently displayed at convenient places.
- d. When ite.ms are received in bulk, all packaging materials such as paper, ice, foam, should be removed before weighing. If several items (such as ground beef and organ meats) are packaged in one large container, they should be sorted out and weighed separately.
- 3. The quality and wholesomeness of the delivered goods should be ascertained. This may be achieved by random inspection of the most representative samples of the goods and may be undertaken as follows:
 - a. The goods should be verified for quality against the specifications. Some aspects that should be considered include USDA stamps, USDA certification, USDA shield, brand names, ingredient labels, nutritional labels, and name of the variety on labels. The grades should be particularly checked and verified.
 - b. In the case of fresh fruits and vegetables, the color, freshness, freedom from damage, and overall quality of the products should be checked. Representative samples may be cut, peeled, cored, or sliced to examine freshness, maturity, juiciness, and apparent spoilage indicators. For some products such as potatoes, specific gravity or density may be measured to assess the quality of the product. Size, thickness, and diameter may also be significant representatives of the quality of the products and therefore should be checked,
 - c. For canned products, packaging date, expiration date, batch number and labels should be checked. Any signs of bulging, damage or leakage need necessary action. A can should be cut open for further inspection and experimentation. Any signs of discoloration, undesirable odor, frothiness, and mold or spore growth should be checked. All labels should be carefully verified as to the contents. Based on the ultimate use of the products, oilier factors should be subjectively or objectively evaluated. There are several tests as well as testing equipment that can be used in such evaluations. Tests may be conducted on representative samples for drained weights, syrup concentrations, and acidity. It is advisable that ail products be dated as to the date received in order to facilitate a FIFO (first in-first out) procedure.

d. Since meat items are very expensive and are easily perishable, it is indispensable to have efficient receiving procedures. While inspecting, all barriers such as ice, plastic wraps, and papers should be removed. Whenever applicable, the inspection stamp should he checked and verified. Packages should be checked for ingredients as in the case of such processed meats as sausages and hamburgers. Randomly, representative samples should be checked for meat trim, fat content, fat cover, weight, thickness, and lean percentage. Specifications, particularly IMPS (Institutional Meat Purchasing Specifications) numbers may be indicative of all or some of the attributes listed above and therefore should be verified at the time of receiving. Checks should be made for any signs of discoloration, odor, sliminess, mold growth, and freezer burn. For special kinds or cuts of meats, checks should be made for special characteristics, such as the color of the eyes for whole fish and skin tears in the case of chicken. It is advisable to use a procedure that automatically or conveniently facilitates the FIFO system. One of the efficient procedures followed by many food services to facilitate FIFO includes the tagging of meats. Meat tags are cards that can be attached to meat packages and which contain necessary information in duplicate parts as shown in Fig.1.

Fig -1 Meat Tag

No	No
Date Received	Date Received
Item	Item
Cut & Grade	Cut & Grade
Specialty	Specialty
Weightoz	Weight lbs (kg) oz
Unit price \$	Unit price \$
Extension	Extension
(Wt.* Unit Price)	(Wt. * Unit Price)
Purchased From	Purchased From
Date Issued	Date Issued
Issued To	
(Name/Unit)	(Name/Unit)
Issued by	Issued by
(Initial)	(Initial)
* include any comments regarding this	
meat (quality, yield, % fat, thickness, etc)	

on the reverse side.

Each half contains information pertaining to date, item, grade dealer's name, weight, and price. Other information may be added to suit the requirements- of a particular operation. Both sides of the tag are filled in by the receiving person after checking the meal in. This tag is filled in for each package box, or container. The duplicate half of the tag is removed and sent to the accounting department or to the manager. The tags are used to store the items on shelves in order to issue them when needed in the sequence they were received based on the specified dates. Finally, the person using meat in the production unit will remove the tag and return it to the accounting department or the manager, where it is verified with its original counterpart. The advantages of meat tags are:

- (1) Facilitation and supplementation of inventory records and the checking process, since the quailtity and dollar value of the meats received can be calculated daily by adding the data recorded on the lags.
- (2) Shortages and disappearances of meat items can easily be traced or accounted, for.
- (3) Assurance of checking procedures at time of receiving, since tire items are required to be weighed and recorded.
- (4) Assists the FIFO procedure, in effective rotation, as well as in the aging of particular type of meats, because date of receipt is on the tag.
- (5) Reweighing of the meat items is eliminated since weights are included on the tags.
- (6) Help in calculating meat costs per day or for any desirable length of time. Also, meat costs per meal can be calculated.
- (7) Help in computing and updating of costs incurred on the recipes prepared.
- (8) Help in the comparative ~valuation of the cost of meats.
- (9) Help in tracing the origin of meat, if any problems occur.
- (10) Assists in meat purchasing by indicating the frequency of use of the items and, consequently, the amount to be ordered.
 - e. For dairy products, the tat percentages, density, and acidity may be checked based on the product(s). It is essential to check dates on milk and milk -product containers and place them accordingly. Checks should be conducted randomly for any signs of spoilage. Rancid odors in butters, margarines, or other fatty products should be checked carefully.
 - f. Random cartons of eggs need 10 be opened and checked tor any signs of cracking, soiling, and oiling. Grades and sizes need to be checked in addition to the weights. Eggs should be broken at random and checked for quality and blood spots.

- g. Quality cheeks should be made for other merchandise and nonfood items based on the desirable attributes and the specifications used when placing orders. Dates should preferably be placed on all items to facilitate stock rotations.
- 4. Since most deliveries to foodservice operations include frozen or refrigerated items, it is imperative to check the temperatures at the time of the delivery. It is also advisable to have these temperatures listed on the purchase order or the invoice in order to facilitate checking. Also, temperature charts in the receiving, units are very helpful in checking the required temperatures for various products upon receipt. Spot checks should be made for temperatures, since quality is dependent on the conditions at which the items are handled at various stages of delivery. For certain products, the shape and size of the, ice crystals are indicative of any thawing and refreezing that may have occurred during transportation. Temperatures should particularly be checked for refrigerated and frozen items. Some of the desirable temperatures for products are:

Foods	0 to 20 F
Dairy products	38 to 46 F
Meat and Poultry	33° to 38° F
Fish and Shellfish	23° to 30° F

5. Any shortage, excesses, missing items, and items that are unacceptable should be recorded. The invoice or receiving document should be signed, dated and stamped. A copy may be sent to management and another copy may be handed over to the delivery person, based on the situation. An example of a stamp useful in receiving is shown in Fig 2.

Fig - 2 Receiving Stamp

Date	
Weight / Count	o.k
Quality	o.k
Temperature	o.k
Prices	o.k
Received by	

- 6. All items received and checked should be immediately send to their respective storage areas. Timing is very critical since deliveries received late in the day may take a considerable time for checking and storage.
- 7. Finally, all invoices are checked for correctness and filled individually under their respective receiving records.

15.2 Purchasing of Beverages

The purchasing of beverages is similar in many ways to the purchasing of that buying the best possible products for the established standards as laid down in the catering policy of the establishment, and saving money by buying less-expensive items and brands for ingredients whenever it is possible, as long the quality standard for the product is maintained. Expensive products do necessarily indicate or guarantee superior quality. As beverages can frequently contribute more to profits than food does, it is essential that adequate attention given to this area.

When operating a wine list of any standard, it is important to ensure before hand that the suppliers are able to guarantee the caterer continuity of supply for at least six months, or else the :vine list would need to be printed frequently.

The laying down of wines by caterers is in the main a thing of the past, owing to the value of stock tied up and the rate of return required today from any capital investment.

The major sources of supply of beverages are:-

- 1) Wine Shippers These are firms that buy wine in the country of origin and supervise the shipment of it to the country in which it will be sold. The shipper is often a specialist of just one region and so is an acknowledged expert for the region. To the purchasing officer, a shipper is able to offer a limited range of high quality products as well as specialist advice. The accepted drawbacks to using shippers are that normally they will only deal with the large catering companies the very prestigious establishments, the product range is limited; the minimum order level is too large for the storage facilities available to most catering establishments and the frequency of delivery and post sales service is limited.
- 2) Wholesalers -These are either independent companies or subsidiary companies of a large brewery. They usually will ~ell any proprietary beverage product that is required, but as a first preference will sell their own label product that is required, but as a first preference will sell their own label products. Wholesalers offer a very wide range of products, a good and regular delivery service, and good post-sales service. In addition to this, they also offer fringe services such as free printing. If wine lists and promotional material for both bars and table service. The accepted drawback to using a wholesaler is the anonymity of the service, as usually only a sales representative is seen by the caterer, a lack of specialist knowledge and prices not being as competitive.
- 3) Cash and Carry: Cash and carry establishments' offer limited range of wines, sprits and beers at very keen prices, but do not offer an specialist advice on the products or any post -rates service. Cash and Carry establishments are useful in emergencies, or for catering units with a limited demand for beverages.
- 4) Suspended Debts This method is operated by some wine and spirit companies. The Company invoices the caterer for his initial opening cellar stock, but requests payment

only on subsequent invoices, the first invoice being "Suspended" until the account is closed. This method is particularly useful to small catering concerns when opening up in business or opening new units, as it frees cash which would otherwise have been tied up in stock. The obvious drawback that of being tied to one supplier.

5) Cellar Stocks and Suspended Debt Accounts: This method is similar to the one above. The supplier agrees with the caterer as to what his monthly par stock should be. The supplier then stocks the cellar free of charge; all opening stocks the cellar free of charge, all opening stock levels being recorded in a cellar ledger. Stock is then taken at the end of the month, and all items issued from the cellar are charged to the caterer. The par stock is then made good by the supplier. The main advantage is that the initial cellar stock is not charged against the caterer, only that part of it that is issued during the month. The main drawback is that of being tied to one supplier.

15.3 Purchase Specifications

Unlike the purchasing specification for food, specifications for beverages are simple to write and to understand. This is because the products are sold and purchased mainly by brand label name of the producer, and the products are in the main non-perishable, consistent in quality and standards of contents, the quantity being standardized in specific sized barrels, bottles, cans etc. It is most unlikely, unless the purchaser was buying in vast quantities, for any variation to the standard to be possible, and then only to products such as house wines, cordials and some spirits. A specification for beverages thus able to be written on the actual purchase order form.

Gordon's Special Dry London Gin	13 FL. oz Bottles.
Robinson's Lemon Barley	25.5 FL. oz Bottles.

15.3.1 Standard Purchase Specifications

Standard Purchase Specifications is a concise description of the quality, size and weight or count factors required for a particular item. It is something-which is particular to an establishment and which has been determined by its management after a study of the requirements of the menu with its price structure, and the policy of the firm. Once established, the specification must only take place with the approval of management. Printed copies of these should be freely available to the purchasing staff, the store man, the receiving clerks, and all senior catering staff. Copies or particular sections e.g. vegetables, fruit, fish etc. must be sent to and fully understood by, all of the firms approved suppliers.

The Objectives

The reasons for preparing standard specifications are as follows:

- i) To establish a buying standard for a particular community for an establishment.
- ii) To inform the supplier, in writing, precisely what the purchaser requires.

- iii) To establish a common denominator between the purchasing officer and approved suppliers for setting the price of a commodity.
- iv) To inform the receiving clerks and the storeman what to accept.
- v) To obtain a standard product for the production and selling departments.
- vi) To obtain a standard product, so that the measurement of performance of departments can be more accurate.

15.3.2 The preparation of Standard Purchase Specifications

Firstly a quantity is necessary for any commodity for which a specification is to be considered. It would be extremely difficult to find a supplier who would be interested in supplying a small quantity of a commodity to a specification at infrequent times, unless the price was very much in the suppliers favor.

Secondly, a very clear understanding necessary as to the exact purpose of the specification, so that everyone involved in its preparation is clear as to the use of the commodity. Before the specification can be printed and sent out to suppliers, it is necessary for all persons concerned (i.e. the manager or his delegated representative, the purchasing officer. and head chef: the restaurant manager, the catering manager) to be involved in a series of properly conducted yield and product tests to decide the details of the specification. The tests conducted would examine a commodity tor such things as quality, appearances, sales appeal, taste (under the same conditions as it would be consumed by a customer the cost price as purchased, the cost per servable ounce, and the portion size.

There are occasions when it is desirable to involve the suppliers in these tests so that they understand why a specification has been prepared in a particular way and its purpose. This particularly applies to butchers when, in order to reduce a firms storage requirement and labor costs, the specification requires from butcher a particular preparation for an item of meat.

It is essential that the specification drawn up in clear terms, so that no misunderstanding can arise in the use of terminology, as this may lead unnecessary litigation.

15.4 Clerical Procedures and Forms Used.

(i) Purchase Orders

Purchase orders are sent out to suppliers giving details of the quantity and quality of items required to be delivered. The quality is often detailed in a specification manual which appointed suppliers would have in advance. The purchase orders are often made out with five copies, each copy being color-coded to aid the correct distribution of them. A typical distribution would be:

- (a) White top copy Sent to supplier
- (b) Yellow copy Sent to accounts department
- (c) Green copy Sent to receiving department

(d) Pink copy	Retained in the purchasing office and filed under supplier.
(e) White bottom copy	Retained in the purchasing office and filed under supplier until
	goods are received and then filed under order numbers.

When ordering perishable foods daily or banqueting wine requirements on the telephone, it is not possible for the supplier to be sent a purchase order in advance. A telephone confirmation order should, however, be sent off to the supplier as soon as possible after placing the order on the telephone. This would be similar in layout to the purchase order but clearly headed "Telephone Confirmation Order".

The receiving clerk should have a copy of the purchase order or of the daily quotation sheets; these would be compared with delivery notes accompanying any delivery.

(ii) Delivery Note

All deliveries must firstly be checked for quantity by comparing the delivery note with a copy of the purchase order. If the quantities match up, the items are checked for quality. It is then necessary to check the delivery note which is normally in duplicate. If this is found correct, the top copy is retained in the receiving department and the second copy is signed by a senior member of the receiving department and returned to the delivery man. When the quantity if items delivered is less than that stated on the delivery note, or when items are not delivery man, complications can arise which result in a mass of correspondence between the firm and the supplier. To overcome this many firms have "Request for Credit" slips printed, which they complete themselves when necessary and obtain the delivery man's signature.

(iii) Goods Received Book

A simple form of book is illustrated in Figure 2. This shows the supplier's name, the purchase order number, and the delivery note number. A remark column is used when the purchase order and delivery note do not match together; this then acts as a reminder of action to be taken. This form of goods received book is used in small establishment. In many large establishments a type of analyzed receiving book is used. The advantage of this is that an analysis of goods entering the firm is made which can be measured against standards. Also it enables the receiving department to undertake an analysis of purchase in the afternoon and this relieves the control office of this additional work.

Goods received book

Signed:			Date:
Supplier's name	Order No.	Delivery Note No.	Remarks ii

15.5 Determination of economic ordering quantity

EOQ referrs to the size of the order which gives maximum economy in purchasing any item of raw material or finished product.

It is fixed mainly after taking into account the following costs:

- 1. Ordering cost
- 2. Inventory carrying cost

Inventory carrying cost is the cost of keeping the items in stock and would include interest on investment, obsolescence losses, store keeping costs, insurance premium. The larger the inventory the more will be the carrying cost. It is also refered to as the holding costs

Eoq = <u>2 x annual demand x cost of placing an order</u>

annual or monthly cost of storage of one unit

Assumptions of the EOQ model

1. The firm knows with certainty the annual usage or demand of a particular item

2. The rate at which the firm uses the inventories or makes sales is constant throughout the year

3. The orders for replensihment are placed exactly when inventories reach the zero level

ABC analysis

It is the technique of exercising selective control over the inventory items. The technique is based on this assumption that a firm should not exercise the same degree of control over all the items.

It should rather keep control over those items that are more costly.

The analysis concentrates on important items and therefore is also known as control by importance and exception. It is also known as the proportional value analysis, since the items are classified in importance of their relative value.

15. 6 Planning and evaluation of food production

- A. Volume forecasting
- B. Standard yields
- C. Standard portion sizes
- D. Standard recipes

15.6.1 Volume forecasting / production planning

It is the method of predicting the volume of sales for an establishment for a specified period

Objectives of volume forecasting

• predict the number of meals / covers to be sold by each outlet

- predict the choice of menu items by a customer
- to facilitate purchasing
- to maintain optimum stock levels
- to control the food cost in relation to the sales
- to compare the actual volume of business with the forecasted volume

15.6.2 Standard yields

The term **"yield"** may be defined as the edible or usable part of the food item which is available after preparation or preparation and cooking

Therefore" **standard yield**" may be defined as the yield obtainable when the item has been processed in the particular standard methods of preparation, cooking and portioning, the items firstly being purchased to a known standard.

Objectives of standard yield

1. To establish a standard for the quantity and the nos. Of portions obtainable from the specific food item

2. To establish a standard for comparison with operating results; and thereby measure the efficiency of the production department

- 3. To establish a method of evaluating the standard purchase specifications
- 4. To establish a standard food cost factor for the item
- 5. To assist in menu costing and pricing
- 6. To assist in converting forecast requirements into raw material requirements

15.7 Standard Recipes

May be defined as a written formula for producing a food item of a specified quality and quantity for use in particular establishment. It should show the precise quantities of the ingredients together with the sequence of preparation and service of the item.

OBJECTIVES OF STANDARD RECIPES

- 1. To pre-determine the quantities and quality of the ingredients
- 2. To pre-determine the yield obtainable from a recipe
- 3. To pre-determine the food cost per portion
- 4. To pre-determine the nutritional value of the dish
- 5. To facilitate menu planning
- 6. To facilitate purchasing and internal requisitioning

7. To facilitate food preparation and portion control

STANDARD PORTIONS

A standard portion size represents the number of ounces of food item to be served to the customer in relation to the food cost and the selling price of the item

15.8 Materials requirement planning

THE OVERALL APPROACH USED BY MRP IS AS FOLLOWS:

- Obtain forecasts of the demand for the final product
- break down or explode the final customer requirement into component parts the gross requirement
- compare the gross requirements with the available inventories to produce the net requirements
- thus schedule the provision of the net requirement for component parts to meet the completion program, taking into account available capacity

SALIENT FEATURES TO BE NOTED BEFORE SIGNING INTO ANY CONTRACT

- Mention the period of the contract
- Estimate quantities as accurately as possible
- Establishment to divide the contract between different suppliers
- Purchase specifications
- Removal of rejected food
- power to pirchase during times of default
- prevention of corruption
- indemnity against damage
- place and time of delivery
- service to break a contract
- invoices to be delivered within a stipulated period of time after delivery
- payment of invoices

HOTEL PURCHASE COMMITTEE

- General manager
- Unit financial controller

• Purchase manager

THE HPC WILL PERFORM THE FOLLOWING FUNCTIONS:

- 1. Approval of price changes in existing orders/rate contracts.
- 2. Approval of orders for new products or brands, changes in operational supplies
- 3. Review of periodic contracts for supply of foods, perishables and groceries
- 4. Approval of increased stock levels
- 5. Approval of new vendors/discard of old vendors/blacklisting
- 6. Approval of all orders above rs. XYZ

15.9 Summary

Efficient food Purchasing methods demand good receiving procedures in order for the system to work. The dollars saved by careful food purchasing may be lost quickly by inefficient receiving practices. In many operations, purchasing and receiving are controlled by single department so that both this importance functions can be coordinated. The ideal situation would be that the person(s) who place the orders be responsible for the receiving and checking, but this is not practical in larger operations. The receiving operations should be handled by competent and knowledgeable persons. The link between purchasing and receiving is very critical for the functioning of the entire system and is all excellent example of how various sub systems are interdependent on each other.

15.10 Self Assessment Test

- 1. Explain Purchasing process for Meat and Meat products.
- 2. Explain the Purchasing process for Beverages.
- 3. Write short note on Storages areas used for storing different Food Items.

15.11 Further Reading

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UNIT 16

Production Control

Structure

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16.0 Learning Objective

In the unit learner will understand the importance of production controls, learner will also be able to list various methods of production control. The learner will also be able to calculate food cost, implement various techniques of production controls. Leaner will be able to standardize recipes and prepare a checklist of control points.

16.1 Food Production and Service Controls

Production and service involve many more activities-and many more human resources-than other control points. The production activities discussed in this unit demonstrate the extent to which food and beverage operations depend on human resource. Labor-saving equipment has not replaced people in many hospitality activities.

As managers develop control procedures for production and service, they must consider the impact that operating/ control problems will likely have on guests. As managers plan control procedures for purchasing, receiving, storing, and issuing, it is sometimes easy to forget about the guests being served. However, production and service activities require that the manager focus on guest-related concerns. The manager who attempts to control his or her operations without considering guest response and reaction will fail to control effectively, and the organization will not be successful.

16.2 Production Planning

It is the first step toward ensuring quality products and dining experiences that meet or exceed guest expectations. Production actually comprises three control points: preparing, cooking, and holding. Personnel assigned to these areas are responsible for the wholesomeness, goodness, and attractiveness of the foods and beverages served to the guests. Even though the cost and quality of foods and beverages may have been expertly controlled before their arrival at production centers, all gains will be lost if there are no control procedures to guide management and staff through production and service.

Production planning is simply getting ready for production. Operations of all sizes must plan for production if they are to have food and beverage products, personnel, and equipment available when needed. Planned coordination among departments also prevents under- or over-utilization of resources. While planning does not guarantee that all problems will be eliminated, it certainly addresses many that may have serious economic and marketing consequences. Success, in most instances, correlates with successful planning.

Each food and beverage operation must develop specific procedures for production planning that are suited to its own unique needs. However, a typical strategy is to first forecast production requirements and then translate those requirements into production plans.

16.2.1 Forecasting

Quantities of products required for expected production activities during an upcoming week of other planning period must be estimated. These projections typically include sales history information. A careful analysis of previous unit sales can help control production quantities and reduce leftovers during the period for which planning is undertaken. Seasons, weather, special events within the community and similar factors also affect production estimates. These must be taken into account in forecasting production requirements during planning sessions.

Sales history records can tally sales by the hour (frequently conducted in quick-service properties), meal periods, days, or other time periods of use to the manager. Commonly used is a technique that generates sales history data each day of the week. Data can be derived from guest check tallies (manual system) or from cumulative sales from electronic cash register/point-of-sale (ECR/POS) systems (daily sales summed for a specified fiscal period such as week or month).

Managers and chefs can use this sales data to help benchmark estimates of sales for the next planning period.

Another forecasting technique involves comparing sales data for the past month and a selected number of months from the past year. Using sales data applicable to several (or more) months allows many variables to "average out" for production forecasting purposes. In addition, this data is very helpful input for menu revisions; managers wish to sell popular items and remove those that are unpopular.

Computers can be very useful in the projection of production requirements. Electronic files can store historical data, and computer software can be developed to apply these records for future use. Computer systems typically employ time series analysis to make necessary calculations.

The computer may develop its forecasted projections based on stored data, manually input data, or data transferred from an ECR/POS system. Its output can also be-helpful in developing purchase order requirements and labor needs and for providing additional assistance to management. Computer forecasts are performed quickly and accurately, which increases their value to the operation.

16.2.2 Production Plans

Regularly scheduled planning meetings should be held, with personnel most directly involved with production activities attending. For example, in a small operation, the manager and head cook may meet every Wednesday to review production plans for the week beginning on Friday or Saturday.

During these meetings, estimates of production needs, derived from a study of sales histories and similar information, must be adjusted and converted into production plans. Sales history records using data from manual or computer tallies can be used to produce a planning sheet. Food production personnel can use this form to determine the amount of each menu item ingredient to purchase. Automated systems make these calculations electronically, prepare shopping lists and, if desired, generate purchase orders for supplies.

Other matters must be considered at the production planning meeting. Based on the estimated production needs, labor and equipment can be scheduled at this meeting. For example, perhaps a special catered event requires items to be produced in especially large quantities. The sample equipment schedule shown in Exhibit 3 relates how to use existing equipment to produce a large quantity of bread products for a special banquet.

After the production planning meeting, the required number of each menu item for the forecast period is known. Therefore, issue requisition forms for some days or items also can be partially completed. For catered events, it is possible that these requisition forms could be completed in their entirety if these costs are charged to a separate revenue center.

16.3 Developing Standards

It is part of the process of controlling food and beverage costs. Standards specific to the property's current plans will better indicate problems (variances from planned revenue and cost levels) than will standards based on industry averages or standards developed from the property's past operating statistics.

The usefulness of control information can be increased by establishing standards for each revenue center within the food and beverage operation. For example, instead of computing a standard food cost covering all outlets, a hotel might establish separate standard cost levels for its coffee shop, dining room, room

service, and banquet operations. An advantage of this alternative is that each outlet can be evaluated separately, based on its own set of anticipated costs.

As a standard becomes more specific, more time is required to develop and monitor it. The longer the time needed to collect information on which to base the standard (or later to measure actual results), the less the likelihood that practical managers will take the time to do it. In addition, the more complex the development of standard costs becomes, the more likely the task will be met with resistance by those who must collect the information.

Therefore, an ideal control system must strike a balance between the time and effort spent developing it and the usefulness of the results the system provides. Simplified time- and cost-effective systems for determining food and beverage standards are offered in this chapter. The principles for establishing standards are the same regardless of whether the property is commercial or institutional, large or small, fast-food or gourmet, hotel or restaurant. Managers in any kind of operation who want to develop inhouse food and beverage standards can use the procedures discussed in this chapter.

Systems for developing food and beverage standards must begin with the menu. Because it establishes which food and beverage items will be served, the menu is the most basic and important control tool. Once a menu is created, five standard cost tools can be developed:

- 1. Standard purchase specifications
- 2. Standard recipes
- 3. Standard yields
- 4. Standard portion sizes
- 5. Standard portion costs

The development and use of each of these tools is sequential; effective managers develop them in order and use the previous cost tool to develop the next cost tool.

Let's look at each of these standard cost tools very carefully.

16.4 Standard Purchase Specifications

A purchase specification is a concise description of the quality, size, weight, count, and other factors needed to describe a desired item. The specified factors should be described in sufficient detail to properly guide the company's suppliers and receiving personnel in the delivery and receipt of the desired products.

Management should establish standard purchase specifications based on menu requirements and the operation's merchandising and pricing policies. Once developed, standard purchase specifications should be given to those responsible for purchasing, as well as to the property's suppliers and receiving personnel. In this way, all of the parties involved in ordering, supplying, and receiving will have the necessary written guides to permit the operation to consistently obtain the quality and kind of food and beverage items desired.

In addition to describing what the operation requires, standard purchase specifications offer several other advantages:

- Fewer products may be required. Analyzing the menu may suggest ways to use an ingredient for several menu items so that fewer ingredients have to be purchased. For example, a medium size chicken may be used both for a tandoori platter and a chicken sandwich rather than purchasing chicken of two different sizes for the two menu items.
- Reduced purchase costs may be possible. Purchase specifications based on the needs of the menu will keep the property from buying higher quality products than it needs for its purposes.
- If purchase specifications are properly established, more than one supplier will likely be able to quote prices and compete for the operation's business.

The development and use of specifications involves time and effort. However, considering the many advantages purchase specifications offer relative to the few disadvantages, they are clearly a critical standard cost control tool. Carefully developed and rigidly enforced specifications help the operation ensure that the right quality product is consistently available for production and service. Remember, however, that standard purchase specifications call for effective receiving control procedures to be effective.

16.5 Standard Recipes

A standard recipe is a formula for producing a food or beverage item. It provides a summary of ingredients, the required quantity of each, specific preparation procedures, portion size and portioning equipment, garnish; and any other information necessary to prepare the item. The advantages of standard recipes are relevant in both food and beverage preparation: The primary advantage of following a standard recipe is that, regardless of who prepares the item or when it is prepared, the product will always look, cost, and taste the same. The consistency in operations provided by the standard recipe is at the heart of all control-and many marketing-systems.

There are several other reasons to use standard recipes in addition to the advantages of consistency in appearance, cost, and taste:

- When managers know that the standard recipe will yield a specific number of standard-size portions, it is less likely that too many or too few items will be prepared. They can estimate the number of portions required and adjust a standard recipe to yield the number of portions needed.
- Since standard recipes indicate needed equipment and required production times, managers can more effectively schedule food production employees and necessary equipment.
- Less supervision is required since standard recipes tell the workers the quantity and preparation method for each item. Guesswork is eliminated; cook need only follow recipe procedures. Of course, managers should routinely evaluate the quality of items produced to ensure that standard recipes are followed correctly.
- If the chef is ill or the bartender is on leave, a product of appropriate quality can be produced if a standard recipe is available.

Using a standard recipe does not require that the recipe be kept in the work area during production times. After a cook prepares a menu item several times, or a bartender mixes a drink several times, he or she will remember ingredients, quantities, and procedures. It would obviously be impractical if, before preparing a

drink. a busy bartender had to refer to a standard recipe. A standard recipe must always be followed and must always be available, but it does not always need to be read before every preparation.

16.5.1 Developing Standard Recipes

Developing standard recipes does not require throwing out existing recipes and starting over. Rather, it often requires standardizing existing recipes according to a series of steps.

Select a time period for standard recipe development. For example, you may choose to standardize three recipes at each weekly cooks' meeting, or spend one hour each week with the head bartender to develop standard beverage recipes. At these meetings, ask the cook or head bartender to talk through the preparation of the item. What are the ingredients and how much of each ingredient is needed? What are the exact procedures? What are cooking/baking temperatures and times? What portion-control tools are, or can be, used? On what plate or in what glassware is the item served? What garnish is used? Double-check the recipe by closely observing the cook or bartender as the item is actually prepared.

Record the recipes in a standard format that will be helpful to those preparing the items. For example:

- Decide on the desirable yield. If 25 portions of a food item are normally prepared for off peak periods and 60 portions are needed for peak times, recipes should be designed to produce these two different yields.
- List all ingredients in the order they are used.
- Decide whether to use weights or measures or both. Weighing is always more precise than measuring, and it is just as practical to weigh liquids, flour, etc., as it is to measure them. Avoid confusion by using consistent abbreviations throughout all the standard recipes you are developing.
- When possible, express all quantities in amounts that are practical for those preparing the item. For example, convert all measures into the largest possible units. Change 4/8 cup to 1/2 cup, four cups to one quart, or three teaspoons to one tablespoon. At this point you need to be sure that the proper equipment is available. It does little good to specify a three-ounce quantity of sugar when an accurate scale to weigh the sugar is not available. Also, when applicable, ensure that the recipes you develop call for standard-size pans and other equipment.
- Record procedures in detailed, concise, and exact terms. Avoid ambiguous statements. For example, what does one cup whipping cream" mean? Does it mean one cup of cream that has been whipped or does it mean one cup of cream that must be whipped? When mixing is called for, tell how to mix (by hand or by machine) and provide the approximate time and exact speed if a machine is used. State the size and type of equipment and small wares such as pans or bowls needed, and always list exact temperatures, cooking times, and other necessary controls.
- Carefully consider potential sanitation problems that can arise in each step of recipe production; note these and incorporate food handling precautions directly into the recipe. For example, if the operation uses a hollandaise sauce (a sauce that is potentially hazardous and highly susceptible to contamination by microorganisms), a last step in the recipe for hollandaise sauce might state: "Hollandaise sauce is a potentially dangerous food that can become contaminated by microorganisms; always prepare in small batches and do not hold on the service line for more

than one hour. Do not store (refrigerate) for later use or use as a leftover. Discard all remaining sauce at the end of each shift."

Provide directions for portioning. Indicate the type and size of the service dish. Also, indicate
portioning equipment, such as ladle or scoop, and specify the expected number and size of
portions. Be sure all required portioning equipment is available for use. If garnishes or sauces are
needed, these should be listed, and recipes, if applicable, should be referenced.

After the standard recipes have been recorded, share them with other production staff. Solicit their ideas about accuracy and possible refinements. Finally, test the recipes to be certain that they yield products of the desired quantity and quality. After successful testing, the recipe may be considered standardized and should then be used without variation.

Despite the advantages of using standard recipes, some difficulties may be encountered in implementing them. Cooks or bartenders, for example, may feel that they can no longer be creative in the kitchen or behind the bar. They may resent the need to put things down on paper. Other potential difficulties relating to staff may be about time or even about whether their positions are in jeopardy ("If anyone can do it, why am I still needed?"). It takes time to standardize existing recipes, and it takes time to train production employees to follow them precisely.

These concerns, however, are minor when compared to the points already noted in favor of using standard recipes. In addition, managers can minimize any difficulties in implementing standard recipes by explaining to employees why standard recipes are necessary and by involving them in developing and implementing the recipes.

16.6 Standard Yields

The term yield means the net weight or volume of a food item after it has been processed and made ready for sale to the guest. The difference between the raw or "as purchased" (AP) weight and the prepared or "edible portion" (EP) weight is termed a production loss. For example, if 25 pounds (AP weight) of pork tenderloin are purchased and, after trimming and baking, 22.5 pounds remain, there is a production loss of 2.5 pounds (25 pounds AP weight minus 22.5 pounds EP weight).

In general, there are three steps in the production process. The first is preparation, which includes such activities as meat trimming and vegetable cleaning. The second step is cooking. Holding, the third step, includes the portioning of those products that have not been pre-portioned. A "loss" can occur in any of these steps.

A standard yield results when an item is produced according to established standard production procedures outlined in the standard recipe. It serves as a base against which to compare actual yields. For example, if the standard purchase specifications are adhered to, and a meat item is properly trimmed, cooked, and portioned, the actual yield should closely approximate the standard yield.

16.6.1 Determining Standard Yield

Standard yields are determined by conducting a yield test. Ideally, everything that does not have a 100percent yield should be tested. (Examples of items with 100-percent yield [100-percent edible portion] are some portion-controlled products such as meats and those convenience foods that ,only need to be plated.) However, from a practical standpoint, yield tests are typically performed only on high-cost items or on lower-cost products used in large quantities.

The yield from a product depends on several factors, including the grade, original weight, and preparation and cooking methods. Therefore, it is helpful for a food and beverage purchaser to compare the yields for similar products from different suppliers. It may be possible to substitute a raw product with a lower cost per unit that provides a yield similar to that of a higher cost product, without com- promising the operation's quality standards.

Since the AP weight is already known (162 pounds), the meat must next be weighed when it is removed from the oven after cooking. By subtracting the cooked weight from the original weight, you can determine the loss in cooking-in this example, an average of 3 pounds, 14 ounces per rib section. Next, the fat cap and bones must be removed and the remaining meat weighed. This is the edible portion or servable weight-in this example, an average of 11 pounds, 3 ounces per rib section. Subtracting the edible portion (servable) weight from the cooked weight indicates that the loss in carving and bones averaged 5 pounds, 3 ounces.

16.6.2 Cost per Servable Pound

Once the edible (servable) portion weight is determined, a cost per servable pound can be determined. To find the cost per servable pound, first establish the yield percentage. The yield percentage (sometimes called yield factor) is the ratio of servable weight to original weight. It is calculated by dividing the servable weight by the original weight (normally both weights are expressed in ounces; there are 16 ounces in one pound) and multiplying the quotient by 100 to convert the decimal to a percentage. For example:

 $\frac{\text{Servable Weight}}{\text{Original Weight}} \text{ '100 } = \text{Ratio of Servable Weight to Original Weight}$ $\frac{11 \text{ 1b} \times 16 \text{ oz per lb} + 3 \text{ oz}}{20 \text{ 1b} \times 16 \text{ oz per lb} + 4 \text{ oz}} = \frac{179 \text{ oz}}{324 \text{ oz}} \times 100 = 55.25\% \text{ (rounded)}$

This means that 55.25 percent of the purchase weight of the beef ribs will be available for service to guests.

The cost per servable pound is found by dividing the AP price by the yield percentage. For example:

$$\frac{\text{AP Price}}{\text{Yield Percentage}} = \text{Cost per Servable Pound}$$
$$\frac{\$5.95}{0.5525} = \%10.77 \text{ (rounded)}$$

In other words, if beef ribs cost \$5.95 per pound, \$10.77 will be required to produce one pound of product that can be plated and served to guests.

The cost per servable pound is the information needed to calculate standard portion costs, discussed later in this chapter.

One can make a similar calculation to determine the totalAP quantity needed once the yield percentage is known. Assume that fifty 8-ounce edible portions of beef ribs in the above example are required for a banquet and that there is a 55.25-percent yield. What quantity of beef ribs; will be needed to yield the 25 pounds (50 portions at 8 ounces per portion) that are requested?

$$\frac{\text{Quantity Needed} \times \text{Edible Portion}}{\text{Yield Percentage}} = \text{Quantity to Purchase / Prepare}$$
$$\frac{50 \text{ portions} \times 8 \text{ oz/portion}}{0.5525} = 724 \text{ oz (rounded)}$$

The cook will have to prepare approximately 45.25 pounds (724 ounces divided by 16 ounces per pound) to yield the 25 servable pounds that are needed for the banquet.

16.6.3 The Cost Factor

The cost factor is a constant value that may be used to convert new AP prices into a revised cost per servable pound when purchase prices change. The cost factor assumes that the standard purchase specifications, standard recipe, and standard yield remain the same. The cost factor is obtained by dividing the cost per servable pound, calculated as part of the yield test, by the original AP cost per pound. For example:

 $\frac{\text{Cost per Servable Pound}}{\text{AP Price}} = \text{Cost Factor}$ $\text{INR } \underline{10.77} = 1.81$ INR 5.95

Any time the AP cost changes from the amount used to calculate the original cost per servable pound in the yield test, a new cost per servable pound can be computed by multiplying the cost factor by the new AP price. For example, if the AP price for the beef rib increased to \$6.29 per pound, the new cost per servable pound would be:

New AP Price	×	Cost Factor	=	New Cost per Servable Pound
INR6.29	×	1.81	=	INR 11.38

One final note: it is critical that all established standards remain the same. The proper use of the cost factor is dependent on the operation adhering to the same standard purchase specifications and following the preparation and cooking methods used in the yield test.

16.6.4 Adjusting Standard Recipe Yields

The yield from a standard recipe can be easily increased or decreased by using an adjustment factor. An adjustment factor is found by dividing the desired yield by the original yield. For example, if a recipe yields 100 portions, and you want 225 portions of the same size, the adjustment factor would be:

Desired Yield	_	Adjustment Factor		
Original Yield	_			
225 portions	=	2 25		
100 portions	_	2.23		

Each recipe ingredient is then multiplied by the adjustment factor to determine the amount needed for the desired yield. For example, if the original recipe required 8 ounces of sugar, the adjusted quantity would be:

Original Amount × Adjustment Factor = New Amount 8 oz × 2.25 = 18 oz (IIb, 2 oz)

The quantity of ingredients to be included in the recipe should be that which is easiest to apply in the preparation area. In the example above, if the kitchen had a 2-pound (32-ounce) .scale, the amount (18 ounces) will probably be appropriate. If, however, only a I-pound scale is available, it would probably be best to specify "1 pound (16 ounces) plus 2 ounces."

A similar procedure can be used to determine the new amount required if the portion size is altered: For example, if a recipe yields for 12-ounce servings, and you want for 8-ounce servings, the adjustment factor would be:

$$\frac{\text{Desired Amount}}{\text{Original Amount}} = \text{Adjustment Factor}$$
$$\frac{8 \text{ oz}}{12 \text{ oz}} = 0.67 \text{ (rounded)}$$

Each recipe ingredient must then be multiplied by this factor to determine the amount of the ingredient required for the recipe. For example, if a recipe required 30 pounds of ground beef to yield forty 12-ounce servings, to prepare forty 8-ounce servings, you would need approximately 20 pounds of ground beef.

Original Amount	Х	Adjustment Factor	=	New Amount
30 lb	×	0.67	=	20.1 lb

A recipe can also be adjusted if both the number of portions and the portion size change. First, determine the total volume of the original and desired amounts, then calculate the adjustment factor. For example, if a recipe yields fifty 4-ounce servings and the desired yield, is seventy-five 6-ounce servings, the adjustment factor would be:

 $\frac{\text{Total Volume of Desired Yield}}{\text{Total Volume of Original Yield}} = \text{Adjustment Factor}$ Total Volume of Desired Yield = 75 portions × 6 oz / portion = 450 oz Total Volume of Original Yield = $50 \text{ portions} \times 4 \text{ oz/portion} = 200 \text{ oz}$

$$\frac{450 \text{ oz}}{200 \text{ oz}} = 2.25$$

Using an adjustment factor can provide very accurate ingredient quantities when the total volume of a recipe's yield does not change significantly. However, the use of an adjustment factor for a recipe in which the yield changes substantially must be done carefully. For example, it is unlikely that a recipe yielding 10 portions of a specific size can merely be multiplied by an adjustment factor of 100 to yield 1,000 portions of the same size. In such situations, it is best to start with the indicated adjustment factor and then carefully modify it until the recipe yields the desired volume. Likewise, one must be careful when calculating revised quantities for spices and herbs. Some chefs, for instance, use the calculation just described as a base to determine the necessary amount of herbs and spices. Then they begin with 50 percent of the quantity and add additional amounts on a "to-taste" basis until they are certain about the exact quantity needed.

16.6.5 Standard Portion Sizes

Each food and beverage standard recipe indicates a standard portion size. This is the fourth standard cost tool for ensuring consistency in operations. Because a given menu item or drink will be the same size each time it is portioned, no guest will get a larger or smaller portion or a stronger or weaker drink. The benefit is twofold: portion costs for the same food and-beverage items will be consistent, and the guests will always receive the same value for the dollars they spend.

Value is the relationship between price and quality. Basing the selling price of the food or beverage item, at least in part, on its product cost will help to establish a fair selling price, or value, from the guest's perspective. Assume that an operation does not provide a standard portion size. On one occasion, a guest may receive a very large portion-a great value. Returning at a later time, the same guest may receive a smaller portion at the same selling price-a lesser value and a disappointment for the guest. Consistency, in terms of value perceived by guests, is a primary advantage of standard portion sizes.

Portion control tools must be available and used every time a recipe or beverage is prepared. Portion control tools include such items as weighing and measuring equipment, ladles and scoops to portion food, jiggers and shot glasses for beverages, and automated beveragedispensing equipment.

Employees must know about portion sizes if they are expected to follow them. Required portion sizes from each standard recipe should be posted in production areas for cooks and bartenders to refer to.

16.6.6 Standard Portion Costs

After standard recipes and standard portion sizes have been developed, a standard portion cost the fifth standard cost tool – can be calculated. A standard portion cost is the cost of preparing

and serving one portion of food or one drink item according to the standard recipe. The process of establishing this cost is called pre-costing.

A standard portion cost is determined by dividing the recipe's total ingredient costs by the number of portions the standard recipe yields. For example, if the cost to prepare a recipe is INR 75.00 and if it yields 10 portions, then the standard portion cost for one item is INR 7.50 (INR 75.00 /10 portions).

The prices for ingredients listed in standard recipes can be obtained from current invoices. Today, many operations use computerized pre-costing systems to keep the per-portion cost of standard recipes current. For example, if the price of ground beef increases, the new cost is entered into the menu management system and all recipe costs in which ground beef is an ingredient are automatically adjusted to reflect the price increase.

A change in the portion size will also affect the standard portion cost. Any time the portion size is altered, a new standard portion cost must be calculated.

16.7 Control Mechanism

Quality Requirements

Managers must consider quality requirements in several different ways. These range from the detailed quality requirements of specific operating standards to the general perspectives of management policy and guest expectations. It is important to remember that control procedures must help-not hinder-the operation's ability to meet its required standards.

Control during production begins with meeting established operating standards. These include using standard purchase specifications, standard recipes, standard yields, standard portion sizes, standard portion costs for food production, and standard glass and ice size for beverage production. These control tools provide procedures for uniformly purchasing, producing, and serving products of the required quality. Food purchase specifications also incorporate quality requirements. They dictate the minimum quality and other requirements that all products must meet. Likewise, standard operating procedures (SOPs) dictate quality standards when, for example, they describe how to thaw frozen products, evaluate convenience foods, and develop production plans.

In more general terms, quality requirements are reflected in the property's marketing plans and strategies. Some managers may wish, for example, to serve an inexpensive hamburger of minimal quality. Others offer an inexpensive but high- quality hamburger. Still others attempt to meet a need for "a hamburger dining experience" and offer gourmet hamburgers. Marketing position statements, operating goals, and management philosophies all express at least minimum requirements that must be built into the control system. Management must use control procedures to ensure that the property's plans, based on guests' needs and desires, are attained.

Even though operators may not have formally evaluated marketing concerns or established written operating standards, their properties do have quality requirements. For example, many

chefs are concerned that only the finest products be served. Managers want to be proud of all items being served. Over time, these implicit standards are revealed to observant and returning guests. Also, the chefs and managers become role models as they consistently emphasize the importance of meeting quality standards

Even without specific marketing plans, a property's history shapes the level of quality that guests will perceive as adequate and come to expect. The status quo- "how we've always done things" - often influences how things will be done in the future. In this situation it is difficult either to reduce quality standards or to increase quality requirements. Quality is not a fixed standard; it evolves as expectations change. Quality is relative to market perceptions about its adequacy. Guests have expectations of the food 'and beverage operation. Successful food and beverage managers know their guests' quality standards. They train and empower their staff to address and, it is hoped, to exceed the guests' wants and needs.

16.8 Maintaining Standards

As mentioned, control during production starts with meeting established operating standards, Food and beverage cost standards-guides to planned or expected results-cannot be developed until standard cost control tools are in use. Cost standards are useless if the tools needed to attain them are not used in production areas. Several conditions make it possible for employees to comply with production standards.

Training. Employees must understand the standards. Training programs for new staff and ongoing professional development sessions for experienced workers are needed. Seasoned employees often forget about, or find shortcuts to, operating procedures. New menu items, new equipment, and revised procedures are among the numerous everyday changes that point to the need for ongoing training for all staff members.

Information. Information must be available at workstations. For example, standard recipes can be put together into readily available files or books for reference. When computerized systems are in place, recipes can be printed out and placed in workstations daily. Portion sizes should also be posted in production areas. Photographs of food items can be posted in food preparation areas (in manual systems) or printed directly on the recipe (in automated systems).

Tools and Equipment. Tools and equipment needed for food production must be available to staff members so that they can follow the standards. It does little good if a standard recipe calls for six ounces of an ingredient and an accurate portion scale is not available (or not used, if one is available). Likewise, if a recipe requires portioning with a number 8 scoop, compliance is impossible unless the operation has the portion tool on hand (a number 8 scoop yields 8 level servings per quart). Operating and control problems will result if proper equipment is unavailable or is improperly used. Suppose a bar recipe specifies a certain glass for a highball. What does the bartender do when, during a rush, not enough of the specified glasses are available? Incorrect substitutions can jeopardize the control system, and, in this example, the manager, not the bartender, has created the problem.

Supervision. Management must routinely supervise personnel to ensure compliance with all requirements. Managers must be alert to and watchful of production practices. Food and beverage managers must be able to perform more than one task at a time. For example, when walking past the bar on the way to the office, the manager can observe whether the bartender is using a shot glass or jigger in preparing a drink. When passing a table in the dining room or the serving line in the kitchen, the manager can quickly judge the portion size of an entree-even though there may be other important concerns at the moment.

16.9 Standard Recipes as Production Tools

Standard recipes play an important role in the overall control system of a food and beverage operation. When standard recipes are developed and consistently followed, product costs can be estimated realistically. Standard recipes are the foundation for establishing budgeting and menu pricing procedures.

Standard recipes are basic food and beverage production tools. They not only specify the ingredients and applicable quantities, but also help determine the required amount of production time. If an employee closely follows the procedures outlined in a standard recipe, it should be possible to predict the time required to produce a given number of menu items.

Properly developed standard recipes can also help define effective work practices. Standard recipes can remind cooks to select all necessary pots, pans, and other utensils on one trip to the pot and pan rack; they can suggest when production equipment should be turned on and off, which can yield energy savings. Safety considerations can also be built into standard recipes. For example, recipes can warn employees not to open a vertical cutter mixer until the blade has stopped or remind them to set the wheel brakes on mobile equipment.

Planners should have standard recipes readily available during planning sessions, and supervisors should confirm that standard recipes are consistently used by all food and beverage production personnel. Standard recipes must be used to ensure consistency in meeting guests' desires and in attaining cost and profit goals.

16.10 Production Cost Control Methods

- It is important to keep track of food cost and inventory
- It is also important to ensure that the food orders are placed correctly and no excess orders are placed.
- Production manpower should be trained to control the portion size
- Ensure that there are proper tools to serve and there are no wastages
- The Menu should be balanced with easily available ingredients
- The service staff should also be trained to sell items which have low food cost.
- DO not depend on increasing the menu price to control the food cost, rather re work on the menu.
- There should be a centralized purchase order system for getting discounts and optimizing the costs.

- The purchase department should take advantage of bulk purchases and discounts
- Inventory should be maintained to minimum and have proper store room
- Use well trained manpower
- Have proper storage for unused items
- The discards should be approved by senior management
- Proper system for left over reports so that portions can be controlled.

16.11 Summary

Guest Satisfaction depends directly on production and serving, the control points are in many ways the most important and among the most complex. Production, for example, must ensure quality while complying with cost limitations. And service-an art much like acting-requires proper timing, accuracy, and numerous other activities to provide a dining experience that will make guest happy.

16.12 Review Questions

Q1 What are the methods of forecasting used on Hotel Industry?

Q 2 Discuss in short Standard Purchase Specifications.

Q 3 Elaborate on Standard Yield and methods of calculating standard yield.

- Q 4 What are the various control mechanism used in hotel to control food cost?
- Q5 Discuss Standard Recipes as Production Tools

16.13 Suggested Reading

- 1. Jack D Ninemeire, Planning and Control for Food & Beverage Production (Sixth Edition)
- Albala, Ken (2011.) Food Cultures of the World Encyclopedia Greenwood. ISBN 978-0-313-37626-9
- 3. Zobel, Myron (1962.) "Global cuisine: being the unique recipes of the 84 top restaurants of the world." Patron Press.
- 4. Cooking Ingredients Christine Ingram (Hermes House) Year 2007
- 5. Theory of Cookery Krishna Arora (Frank Bros. & Co.) Year 2008
- 6. Food Production Operations Parvinder Bali (Oxford Publication) Year 2009
- 7. Larousse Gastronomique Hamlyn Publications Year 2009