

UNIT 1

CHAPTER – 1 KITCHEN MANAGEMENT – LAYOUT & DESIGN

Kitchen Management

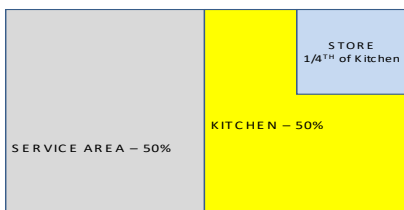
- 1.1 Flow of work
- 1.2 Layout and design
- 1.3 Food Cost Control

A kitchen is an enclosed place in which edible food material are brought together, combined and cooked in different ways of consumption.

The sizes of the kitchen are varying according to the nature and work to be done. Usually the space allotted to the kitchen approximately $\frac{1}{2}$ of the dining area, but, it can vary according to the size and type of establishment, type of menu, etc. As a rule, a compact arrangement of work tables and kitchen equipment will unnecessarily waste time and efforts in the kitchen. The general guide line, 2.5m x 3m is sufficient for a single person to work while 2.5m x 4m provides a comfortable space for 2 persons. A space of 4 $\frac{1}{2}$ feet from equipment is desirable and aisles must be adequate to enable staff to move safely.

Thumb rules for planning a kitchen are:

1. Approximately 15 square feet is required per person.
2. Kitchen is 50% of the Service area; store is $\frac{1}{4}$ th of the kitchen, the service area is 50%.



Factors affecting Kitchen Layout and Planning of Kitchen

1. Size and extent of the menu and the market it serves
2. Services – gas, electricity and water
3. Labour, skill level of staff
4. Budget: Amount of capital expenditure, costs;
5. Availability of Space
6. Use of prepared convenience foods
7. Types of equipments available
8. Should comply with the Municipal corporation standards
9. Design and décor
10. Multi usage requirements

1. Size and extent of the menu:

Before a kitchen is planned, the management must know its goals and objectives in relationship to market strategy. In other words what markets are you aiming at and what style of operation are you going to operate? The menu will determine the type of equipment you will require to order to produce the products that you know from the market research that the customer is going to buy. You also need to know target numbers you intend to service.

2. Services – gas, electricity and water:

The designer must know where the services are located and how efficient use can be made of them.

3. Labour and skill level

What kind of people does the company intend to employ? If semi skilled labour is going to be used in preference to high skilled labour, this will save on more technological equipment; more prepared food will be used and this will have an effect on the overall kitchen design.

4. Amount of capital Expenditure

Most design has to work with a detailed capital budget. Often it is not always possible to design, then worry about the cost afterwards. Finance will very often determine the overall design and acceptability.

5. Availability of Space:

The kitchen design will also depend on the space allocated to the kitchen. Equipment is therefore being designed to cater and generally made customized to fit into the space allocated.

6. Use of prepared convenience foods:

A fast food menu using prepared convenience food will influence the planning and equipping very differently from a a la carte kitchen. Certain factors will have to be determined

- i. Will sweets and pastries be made on premises?
- ii. Will there be a need for larder or butcher dept?
- iii. Will fresh, cold or a combination of both be used?

7. Types of equipments available:

The type, amount and size of the equipment will depend on the type of menu being provided. The equipment must be suitably sited. Computer aided design (CAD) is no often used.

8. Should comply with the Municipal corporation standards

The design and construction of the kitchen must comply with the standards prescribed by the municipal corporation. The basic layout and construction should enable adequate space to be provided in all food handling and associated areas for equipment as well as working practices and frequent cleaning to be carried out.

9. Design and décor:

The trend towards provision of more attractive eating places, carried to its utmost by the chain and franchise operators, has not been without its effect on kitchen planning and design. On trend has been that of bringing the kitchen area totally or partially into view, with development of back bar type of equipment; for example, where grills or griddles are in full public view and food is prepared on them to order.

While there will be continuing demand for the traditional heavy duty type equipment found in larger hotels and restaurant kitchen, the constant need to change and update the design and décor of modern restaurants means that the equipment life is generally shorter, reduced perhaps from ten years to seven or five or even less, to cope with the demand for change and redevelopment.

10. Multi usage requirements

Round the clock requirements such as hospitals, factories doing shift work, the police and armed forces, have also forced kitchen planners to consider design of kitchens with a view to their partial use outside peak times. To this end kitchen equipment is being made more adaptable and flexible, so that the whole sections can be closed down when not in use, in order to maximise savings on heating, lighting and maintenance.

DEVELOPING KITCHEN PLANS:

Following are the main steps to develop kitchen plans.

1. Formulate list of activities: a list of activities performed in the kitchen from storage, issuing of ingredients, preparation and then cooking. **(production cycle 4.1)**
2. Each part of production cycle is broken down into jobs and tasks which need to be performed in a particular order to achieve the objectives of food service establishment.
3. Once the jobs and tasks are defined one has to think of the simplest way in which they can be performed
4. The tasks are then arranged in the sequence so that one task can smoothly follow the others which is known as **“the work flow of an organization.”**

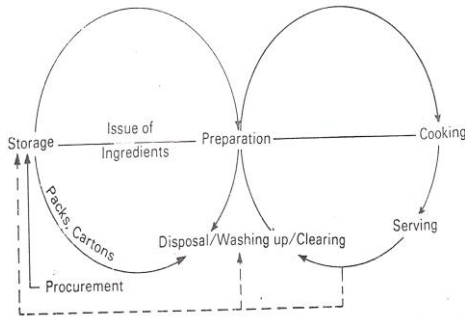
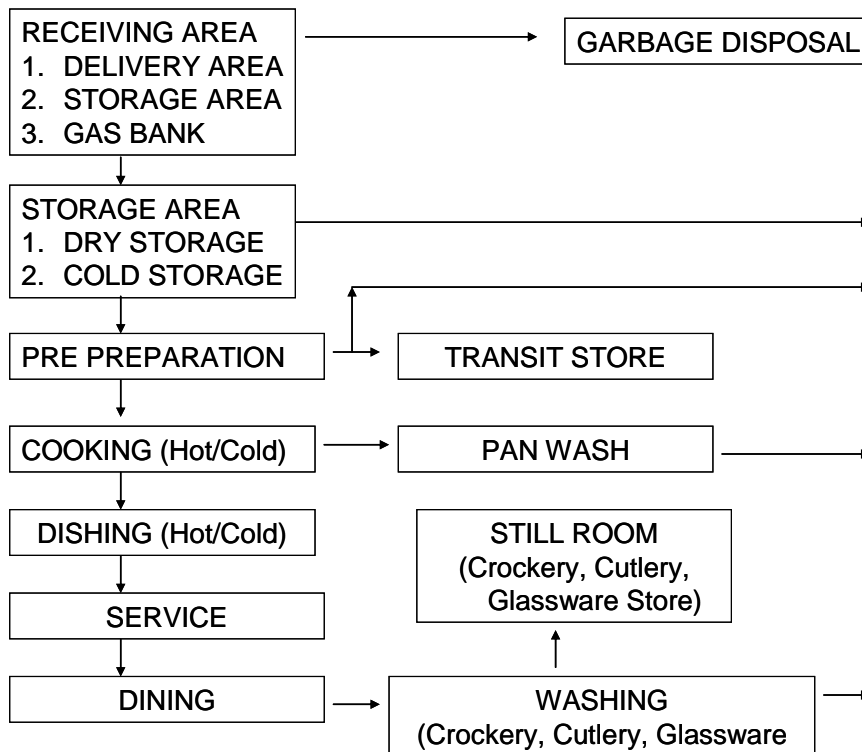


Fig. 4.1 A production cycle showing the activities necessary to serve food to a customer.

WORK FLOW OF A TYPICAL CATERING ESTABLISHMENT



WORK SIMPLIFICATION

Work of the kitchen can be simplified by viewing the kitchen and its activities from five different aspects

1. WORK AREA
2. WORKER’S AREA OF REACH

3. WORK SPACE
4. EQUIPMENTS, MATERIALS , SUPPLIES
5. MOVEMENTS AT WORK

1. **Work Area:** this refers to the area of the work surface, its height from the floor and the location of the equipment and materials to be used on the work surface. It is recommended that for a worker performing a task in the standing position, the height of the work surface from the floor should be just below the waist line, so that there is no need to bend at the waist or hip while performing the task.

AVERAGE RECOMMENDED HEIGHTS IN WORK AREAS

Description	Height in Cms
Height for work surfaces	90 cms
Work surface	85-100 cms
Shelf under work surface	80-95 cms
Sink top	90-100 cms
Bottom of wall units above work top	135 cms
Highest shelf for general use	180 cms
Top of highest unit	225 cms

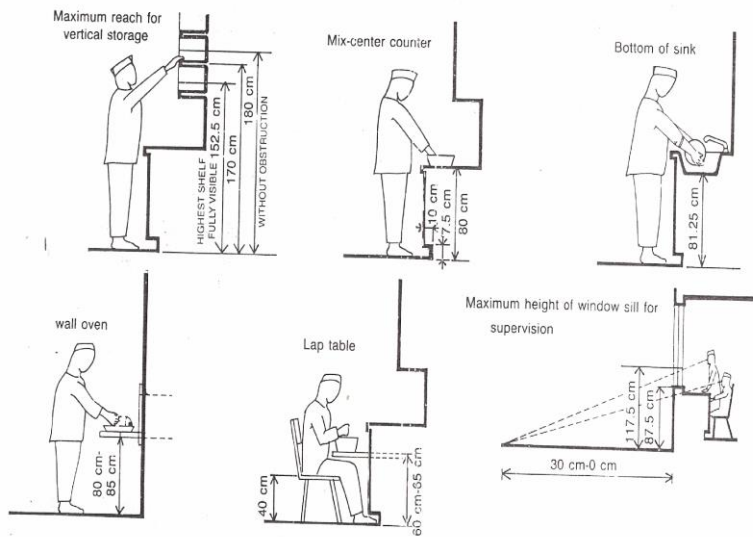


Fig. 4.5 Comfortable working heights.

2. **Workers Area of reach:** The “area of reach” signifies the limits to which a person can stretch his or her hand to grasp materials and equipment, required for an activity.

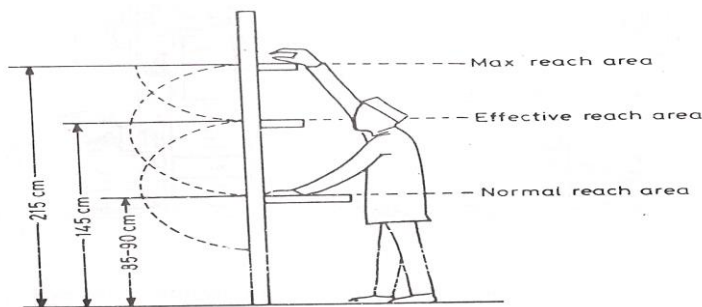


Fig. 4.6 Normal and maximum reach areas.

3. **Work Space:** The amount of space available for work is important for completing tasks efficiently. The space should be large enough to place all the materials and equipment required, as well as allow for movement at work.
4. **Equipment, materials and supplies:** All these have to be considered in relation to the physical structure of the kitchen and the persons using them. Their placement, suitability, quality and quantity, all determine how simple any work can be made. Any materials, supplies or equipment in regular use should be placed within the maximum reach zone, because activity is concentrated in the zone of normal reach. Shelves may be located within these zones for items which are used occasionally. This helps to increase the space within the work area. The normal and maximum reach zones are important in organizing work centres, if one remembers that reaching for an item by stretching upward is less strenuous than reaching outward or downwards.
5. **Movements and work:** one needs to be conscious of how body movements are related to the amount of energy consumed. For this, it is necessary to understand that the body has been designed so that its weight is evenly distributed over the legs. When working in any position the centre of gravity of the body is disturbed causing unequal distribution of weight on the legs resulting in extra energy consumption and fatigue sets in. Thus at work one needs to maintain correct posture to enhance comfort and conserve energy.

DESIGNING WORK CENTERS IN THE KITCHEN LAYOUT

The work centers in the kitchen layout should be positioned with 4 basic concepts kept in mind

1. Smooth work flow
2. Avoidance of congestion at work table and sink
3. Comfortable work environment for work
4. Hygienic and sanitary condition

1. Smooth work flow

Smooth work flow in the kitchen can be easily managed in the sequence of the activities to be performed. It is clear mark out on the basis of work floor principle the production cycle. Work centers can be established for each production activity

The main work centers in the industrial kitchen are:

- i. preparation centre for meats, fish, poultry etc
 - ii. preparation centre for vegetable and fruits
 - iii. cooking centre
 - iv. holding, service and dishing out centre
 - v. washing up/sink centre
2. Avoidance of congestion at work table and sink;
Congestion in the kitchen may result from any one or more of the following;
 - i. Faulty design of work centre and planning /improper placement of equipment while designing kitchen. It is important to keep in mind the movements of workers in and around work centers with a view to avoid unnecessary congestion. An allowance of 15 Square feet floor space per person is adequate if ceiling is less than 3 meter.
 - ii. Improper scheduling of work and timing of performance: It is important that all different jobs are enough yet do not get into coordinated in a manner such as people are busy each others way.
 3. Comfortable work environment for work
Comfort is one of the basic needs of staff in the kitchen. A number of factors contribute to comfortable working conditions
 - i. Temperature & Humidity: Temperature, no higher than 20-26°C is desirable for maximum working efficiency and comfort with 16-18°C in pre-preparation areas and A humid atmosphere creates side effects such as food deterioration, infestation risk, condensation on

walls and slippery floors. Anything higher than 60% humidity lowers productivity. Provision for replacement of extracted air with fresh air is essential.

ii. Structural Features

- a. Provision of correct working heights to enable for people to work without strain.
- b. Flooring should be quiet and not too hard on the feet to cause fatigue.
- c. Ceiling and walls should be designed to absorb kitchen noise.
- d. The level of illumination must enable proper visibility in all areas

iii. Safety: Workers can produce their best if they feel relaxed and safe in their environment.

4. Hygiene & Sanitation:

Dry Food stores should be fly proofed and walls treated with suitable insecticides. All stores should be guarded against rodents and pests, to safeguard both staff and consumers against infested and contaminated food. To maintain satisfactory standards of hygiene and sanitation, it is necessary to keep kitchen neat and clean and to prevent attack of food by bacteria and moulds. It is a good policy to formulate a schedule for regular cleaning and maintenance of the kitchen.

The following points should be kept into mind while preparing a schedule

- i. Wash Floors daily.
- ii. Wash walls, shelves, once a week
- iii. Disinfect the premises once in a fortnight.
- iv. Inspect incoming food for signs damage, spoilage or infestation before storing.
- v. All old stocks should be used first.

TYPES OF KITCHEN LAYOUTS

Siting equipments is an important task of the kitchen planner. The proper siting or placement of equipment ensures that all factors of kitchen layout planning have been considered adequately. This in turn enhances the productivity of the operation.

The WORK TRIANGLE is used when planning a kitchen.

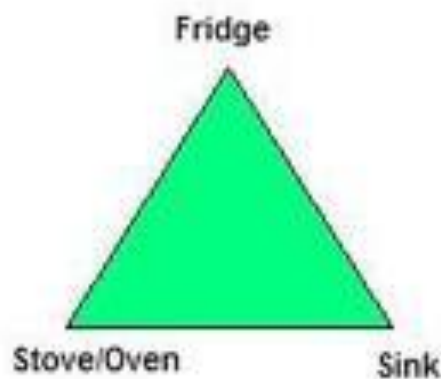
The classic kitchen triangle regulates work flow.

The three "points" of the triangle are:

sink, stove/oven, and refrigerator.

In planning a kitchen, the cook should be able to move uninterrupted between the three points, and the distances between those points should not be far. The three sides of the triangle added together should not be more than 26 feet long, and each side should be between four and nine feet long. This will create a work area large enough for comfort, but not so big that you waste time and energy running back and forth.

WORK TRIANGLE

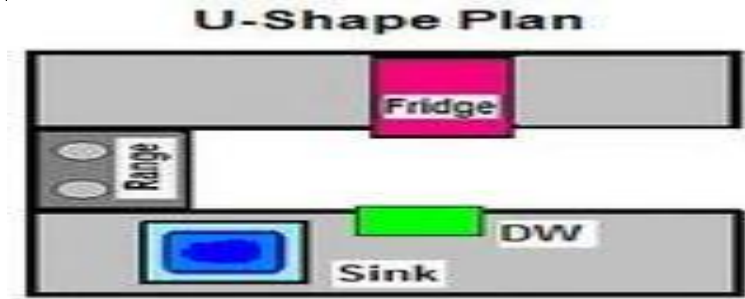


DIFFERENT TYPES OF KITCHEN LAYOUTS

1. "U" TYPE LAYOUT
2. GALLEY TYPE LAYOUT / CORRIDOR TYPE LAYOUT
3. "L" TYPE LAYOUT
4. ISLAND TYPE LAYOUT
5. STRAIGHT LINE TYPE LAYOUT
6. SHORE TYPE LAYOUT
7. Band Type Layout

1. The U-shape kitchen design:

In this type of layout the equipment are placed in the shape of a U and then the service counters are provided outside the U. The closed end gives extra room for a range or a sink. This arrangement maintains good workflow by means of the classic kitchen triangle. The closed end also provides plenty of space for extra cabinets.



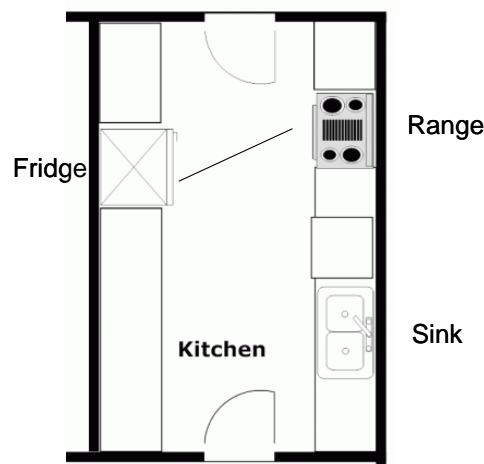
2. GALLEY TYPE LAYOUT / CORRIDOR TYPE LAYOUT:

This is a parallel face to face arrangement. Here, the kitchen equipment are placed in parallel rows facing each other.

Galley or corridor kitchen floor plans (two walls opposite each other) are some of the most efficient you can get, especially for a single cook. With two points of the triangle on one wall and the other point on the opposite wall, your walking distance will be short, but there's also room for plenty of storage and counter space.

Width of the aisle between counters should be about 4 feet.

2. GALLEY TYPE LAYOUT / CORRIDOR TYPE LAYOUT:



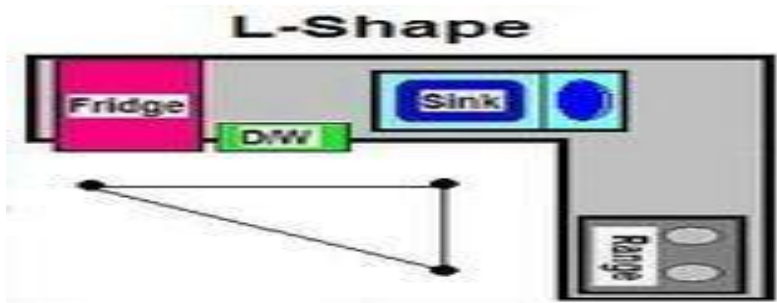
3. “L” TYPE LAYOUT

Along with the corridor plan, the L-shaped kitchen design plan is very popular, though this plan does away with the crowding problems found in the corridor plan. We still find the kitchen triangle, though the walk from range to refrigerator is longer.

The corner counter space (upper right in the illustration) is difficult to reach for food preparation, and is often used for storing mixers, toaster ovens, and other small appliances.

Note that with the increased counter space, a double-sink can be installed.

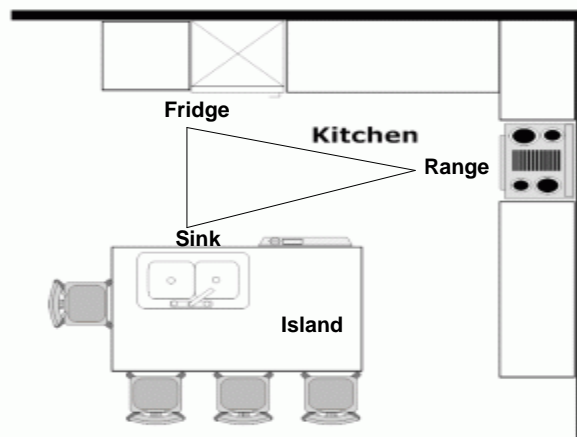
3. “L” TYPE LAYOUT



4. ISLAND TYPE LAYOUT

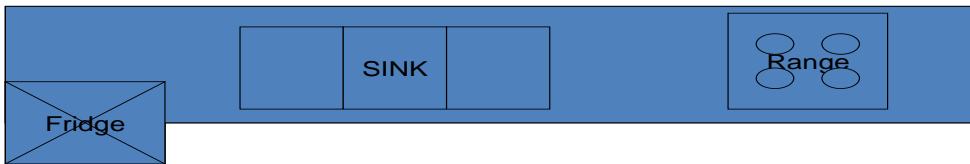
Islands have been so fashionable in the last few years that they have been squeezed into every possible – and not-quite-possible – kitchen. In the right situation, islands can really improve kitchen floor plans but they take more space than you might think.

4. ISLAND TYPE LAYOUT



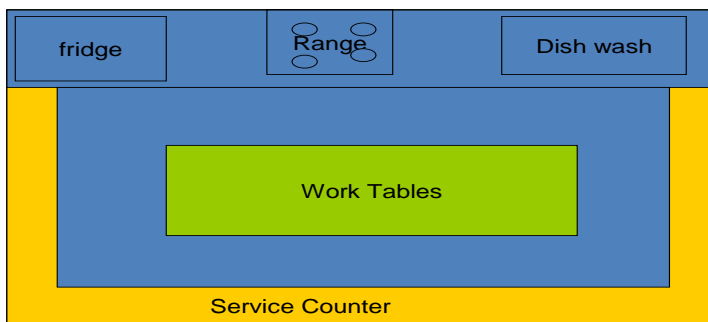
5. STRAIGHT LINE TYPE LAYOUT

This is the simplest of all arrangements and can be seen in hotels that have a large space allotment for the kitchen. This is both roomy and well structured for quick service



6. SHORE TYPE LAYOUT:

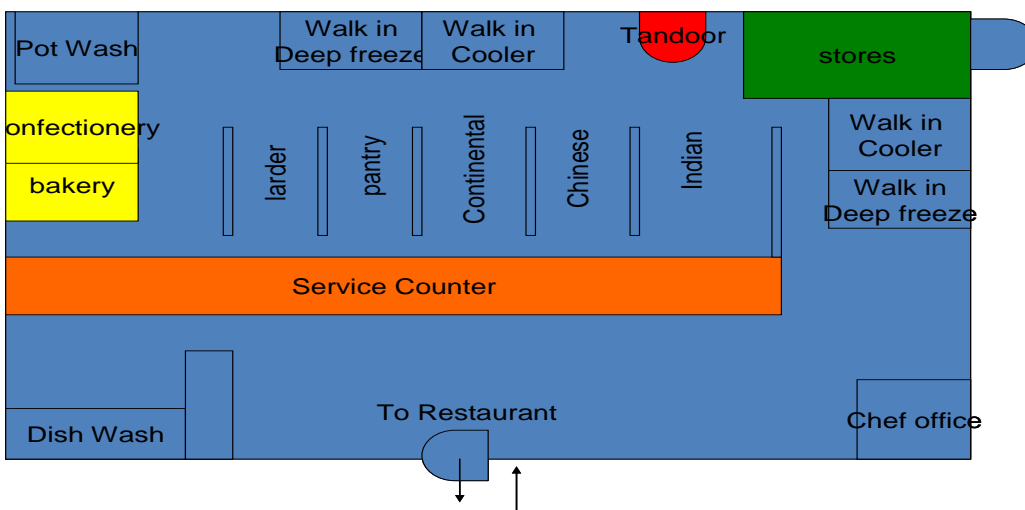
The hot equipment are placed along the walls and the work tables are placed in the middle of the room. In this type of arrangement there are greater costs of ventilation but there are advantages too in case if restaurants open out in different directions.



7. BAND TYPE LAYOUT:

This is also a good system of kitchen layout planning but requires more space than other types. The kitchen is divided into separate sections by the provision of small walls in between them. The equipment required for the departments are housed within the space enclosed by the walls but some commonly usable equipments like wet grinders, peelers etc are placed in an area c

7. BAND TYPE LAYOUT:



1.3 FOOD COST CONTROL

DEFINITION AND NATURE OF FOOD COST CONTROL

Cost control has been defined as the guidance and regulation of the costs of operating an undertaking. To guide and regulate costs means to ensure that they are in accordance with the pre-determined objectives of the business. Hence the notion of the guidance and regulation of costs pre-supposes the existence of stated objectives as expressed in the policy statements and the budgets of the undertaking.

Food cost control is simply cost control as applied to an undertaking operating food facilities. Food cost control is therefore cost control as applied in hotels, restaurants, canteens and similar establishments.

It is quite common in certain catering circles to regard food cost control as something wholly negative designed to cut costs in all directions. This is quite wrong. The object of food cost control is to ensure that costs are neither more or less than they ought to be that they are in line with the financial and catering policies of the establishment.

An important feature, which distinguishes food cost control from systems of cost control in other industries, is its materials costs orientation. In most aspects of food cost control, attention is directed to primarily to the cost of materials (cost of sales) leaving the cost of labor and other operating costs very much in the background. This is mainly due to the fact that in the short run, labor and other operating costs tend to remain fixed and are thus largely uncontrollable

OBJECTIVES OF FOOD COST CONTROL

In many hotel and catering establishments, the expenditure on food is the largest single element of cost. The maintenance of Food cost at pre-determined levels are therefore of the greatest importance in ensuring the satisfactory profitability of each establishment. Even where catering is undertaken as a welfare facility food cost targets and costs ceilings are invariably imposed from above either in total or on a per unit basis. The main objectives of food cost control may be summarized as follows:

1. **Analysis of Income and Expenditure:** In financial accounts, stress is usually placed on an ascertainment of total quantities e.g. sales, cost of sales, gross profit and net profit. In Food cost control on the other hand, much stress is placed on the analysis of such total quantities as between the various departments of the business. We are thus not satisfied with the ascertainment of the total gross profits of the business as a whole, but attempt to ascertain the cost of the profit on each department and each unit produced
2. **Pricing of Food and Quotations:** Another major objective of food cost control is to provide a sound basis for menu pricing and quotations in respect of banquets and special parties. Whilst often, menu prices are fixed by caterers by reference to prices charged by competitors, the correct approach to the problem is to determine menu and other prices in the light of the main costs and market considerations. Thus in addition to a knowledge of prices charged by competitors, the customers spending power etc, it is necessary to take into account the costs of the establishment. This can only be done by installing a sound system of Food Cost Control.
3. **Prevention of Waste and Inefficiencies:** As already noted, the purpose of control is to ensure that current results are in accordance with the pre-determined objectives of the business. Invariably, such objectives are expanded in terms of targets for turnover, cost ceilings and profit margins. Clearly, if such targets are to be reached, all possible forms of waste and inefficiencies must be prevented. In order to be effective in preventing waste and inefficiencies, a system of food cost control must cover the whole field of catering operations – from the purchase of the foodstuffs to the sale of the meals. It will be appreciated that as the catering process proceeds along the line along the line, linking the purchase of foodstuffs to the sale of the meals, there are numerous critical areas (e.g.: receipt of the incoming goods, preparation of meals and cash control) at which considerable losses may be incurred. An effective system of food cost control will therefore place particular stress on such critical areas of control and in this way help the establishment to reach its pre-determined targets.
4. **Data for Management Reports:** An important function to be fulfilled by the food cost control system is the provision of data for periodical reports on food operations. It is said that the manager is like a judge. His judgment is only as good as the information supplied to him. Effective catering

management pre supposes adequate food cost reporting which can only be based on a sound system of control.

OBSTACLES TO FOOD COST CONTROL

In many respects food cost control is more difficult than systems of control in operation in other industries. The specific factors which make food cost control relatively more difficult are discussed here:

1. **Unpredictability of the Volume of Business:** Sales instability is inherent in almost all catering operations. The changes, which occur in the volume of catering, are of several kinds. Firstly, the intensity of demand for food and drink will in most cases vary during the day. As a result, in the majority of establishments, it is possible to observe more or less, peaks of activity during the workday. Secondly, there are changes in the volume of business occurring from one day to the next. (Weekends). Finally, in catering establishments which are to some degree seasonal (resorts), turnover in season will be considerably greater than in the off season.
2. **Perishability of Food:** Food is perishable both as a raw material and in the form of prepared meals. This presents the catering businesses with two major problems. Firstly, when buying perishable foodstuffs it is necessary to ensure that while current supplies are adequate there is no over buying. This applies particularly to highly perishable items such as soft fruits, salads and certain vegetables. Secondly, the quantity of food prepared for each service should be in line with the anticipated demand (forecast). Extra food necessitates re heating and re processing before sale thereby incurring further operating costs. Over production also leads to wastage because most of the times, this excess is not suitable for resale thereby leading to spoilage and wastage.
3. **Daily Variations in Food Production:** In addition to changes in volume of sales there is continual change in the assortment of meals produced by catering units. The assortment of meals will change from one meal to another during the working day. Also, there are considerable changes of emphasis from one item on the menu to another. All shifts of emphasis entail considerable problems relating to all phases of the catering cycle and present many control problems relating to the purchase of the food stuff, preparations of the meals, pricing, cash collection etc. The nature of the products require considerably more control than is the case in many other industries.
4. **Short Cycle of Operations:** Another characteristic feature of catering establishments, which presents an acute control problem, is the short cycle of operations. Whilst in many other manufacturing units the time taken by the production process sometimes lasts weeks (from the time of purchase of raw materials to the sale of the finished product), in a catering operation the cycle is fairly short and lasts at the most a couple of days. Therefore there is little time to exercise control and remedial action if and when required. As a result, checks are done retrospectively. Hence a daily and at times weekly control check needs to be applied.
5. **Multiplicity of Low Value Transactions:** The spending power of customers will vary from one type of organization to another. Even when the customer spending power is high, the total amount spent by the customer consists of a number of small payments for the individual items comprising his meal. The turnover of the catering establishments is therefore the result of a number of low value transactions. This presents several control problems. Control tasks such as forecast of sales, stores, pricing and cash collection are therefore made more difficult.
6. **High Degree of Departmentalization:** Whereas some catering units have one selling outlet, there are many, which have several revenue producing units (e.g. Birdy's, Croissant Etc.). This also applies to the large hotels, which have several F&B outlets including Banquet facilities and Bars. The larger the number of outlets, the greater the difficulties and the more arduous the problems of control. Whilst the analysis of total revenue presents some difficulties, these are magnified when the number of outlets increases. One of the problems of food cost control is to determine the results of each department (outlet), even though the production unit is the same.

METHODOLOGY OF FOOD COST CONTROL

We have defined Food Cost Control, described its objectives and dealt with the difficulties which its application presents. Now, we must deal with the method which should be applied in the development of a system of Food Cost Control.

The development of an effective system of Food Cost Control resolves itself into three distinct phases:

Phase I consists of basic policy decisions in relation to the financial and catering policies of the establishment

Phase II consists of the necessary routine operation controls revolving around the catering cycle

Phase III consists of what may be described as control after the event or post operational control

Phase I

1. **A Financial Policy** – setting out the intentions of the management with regard to the forecasted profitability. This involves setting up a profit target, the determination of departmental profit target and the planning of a whole pattern of differential profit margins in respect of each menu.

The financial policy of a catering establishment should be determined as in the five steps listed below:

- a. Determine the overall profit target. (return on capital employed)
- b. Determine what percentage of net profit on sales must be aimed at.
- c. By reference to the budgeted volume of sales, the type of service and the degree of comfort to be provided to the customer. Determine what percentage of revenue will be required to cover labor costs and overheads, and what percentage of revenue can therefore be available to cover costs of sales.
- d. By reference to the projected sales mix, determine the cost of sales for each department of the business: food, beverages, alcoholic drinks and tobacco.
- e. Having determined the overall cost of sales for each department, plan the differential profit margin for each group of items offered on the menu, wine list etc.

2. **A Catering Policy** - defining the market to be aimed at and describing how it is to be catered for

Phase II Operational Control :

We have now outlined the first stage in Food Cost Control. The second stage consists of a sum total of built in checks (inspection of incoming goods for quality and quantity), technological procedures (yield testing) and clerical procedures (writing out requisitions). These should be planned so as to cover the whole cycle of catering operations. We must therefore deal with operational control in relation to

- a. Buying/Purchasing .
- b. Receiving
- c. Storing and Issuing
- d. Preparation
- e. Sales

Each of the above stages constitutes a highly critical stage of Food Cost Control. Any system installed must therefore cover all the five stages.

A. **Buying** – There are 4 main points to be considered at this stage. *Firstly*, there is yield testing. We have already evolved a catering policy, identified the type of customer, decided on the type of the menu and established a set of costs and gross profit targets. The object of yield testing is simply to discover the respective of yields of a whole range of commodities available for any one purpose and so determine the costs concerned. It is only on the basis of yield testing that we can compile the necessary purchase specifications. By the way, understand that there is a difference between yield testing and product testing. In product testing, we are mainly concerned with the physical properties of the food – texture, composition, keeping quality, flavor etc. In reality, tests are carried out which would combine the two objectives. *Secondly*, we have Purchase Specifications, which are concise descriptions of an item of food. This helps the caterer to communicate with the supplier. Varieties of tomatoes are available, some suitable for salads and some that may be used for soups and gravies. Similarly, brinjals are available for stuffing and others for Bhurta. A set of specifications by themselves will not be of much use. It is necessary to ensure that they are used – not only by the buying office but also by the goods receiving office. *Thirdly*, the methods of buying must be considered. It is clear that no single method of buying is suitable for all types of food. Hence, in relation to each type of commodity, we must decide whether it should be bought open market, via a tender or local purchase/imported. *Finally*, we must determine clerical procedures. It is necessary to decide who originates, sanctions and places purchase orders and

what sort of documentary evidence is to be used. The use of the computer and material management packages is widespread and will help generate reports, which helps immensely with food cost control procedures.

B. Receiving – There seem to be three main points here. The *first* is quality control. Some person must be made responsible for checking the quality of all incoming goods, and it is obviously important to concentrate efforts in the direction of the perishable commodities. The quality of non-perishables tends to be constant over a period of time. *Secondly*, we must assign responsibility for the quantity inspection. The goods receiving clerk normally perform this task. Blind receiving is now quite a popular receiving technique especially in large-scale operations. *Finally*, the clerical procedures must be planned. How much paper work do we really want? Do we keep a goods received book? What action should be taken in the event of non-delivery or short delivery? These questions need to be answered and the policies framed. Today, the computer helps to eliminate a lot of paper work. But, is the organization financially equipped to install computers? Do they possess the personnel to operate the software??

C. Storing and Issuing – Several important matters must be planned for the third stage of the cycle. *First*, there is the problem of stock records. It is necessary to decide whether or not these will be kept at all and also for how long! *Secondly*, the matter of pricing of issues must be decided upon. In other words, we must choose one or more of the following for computing the cost of food consumed:

- Actual purchase price
- Simple average price
- Weighted average price
- Inflated price
- Standard price

Thirdly, stocktaking must be considered. Decisions must be made with regard to its frequency, the pricing of stocks, methods with dealing with discrepancies etc. *Finally*, the necessary clerical procedures must be established and introduced. Who writes the requisitions? How many copies? Who will sanction? These are some of the questions that must be answered.

D. Preparing – This is possibly the most critical stage of the cycle. The cost of food consumed depends on two factors: the number of meals produced and the food cost per meal. In order therefore to control food costs we must be able to control the numbers being catered for (we must have some method of volume forecasting) and control the food cost per meal in advance (standard recipes and portion control). Volume forecasting is a method of predicting the sales volume for a future period. In order to be of practical value, the forecast must predict the total number of covers as well as the choice of menu items. The process of volume forecasting consists of two stages: First, we have what we know as the initial forecast. This is done once a week in respect of each day of the following week. The initial forecast is based on sales histories, data relating to advance bookings as well as current trends. When the initial forecast has been completed, the predicted sales are converted into quantities of raw material. Purchase orders can then be prepared and sent out to the suppliers. The second stage is known as the final forecast. And this usually takes place a day before. The final forecast takes into account the latest developments including weather etc. If required, supplier's orders can be amended. It must be understood that volume forecasting is not a perfect method of prediction. We cannot really tell the future. It does however help to minimize over and under production of food.

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E. Selling – At this last stage of the catering cycle, we are concerned with three main problems. The financial and catering policies will have defined the price policy of the business. In operational food cost control, we are therefore only concerned with the routine pricing of food. Where differential profit margins have been evolved, this is a relatively simple matter. A more important tactical task that has to be faced is to ensure that any increase in the quantity of food prepared is matched by a corresponding increase in cash received from the customer. This will require a restaurant checking system. The final problem is of cash control. We must ensure that all amounts received by the waiting staff are paid to the cashier. He in turn has to deposit each day's takings.

Phase III – Control after the Event

The last phase of Cost Control is concerned with three important matters:

1. Food Cost reporting
2. Assessment of Results
3. Corrective Action where appropriate and necessary

The *first* point is obviously a matter of some importance mainly for reasons of the specific character of catering operations. Food is a highly perishable commodity and whether in the form of cooked meals or raw materials, it cannot be stored indefinitely. Moreover, the demand for catering facilities shows unpredictable trends and unexpected changes. The cycle of production is extremely short, unlike other manufacturing operations such as automobiles for example. All this means that current operations must be reviewed frequently and that there is a need for a short review period. In order to control a food operation effectively, the manager must have daily, weekly and other reports covering longer periods.

The *second* important aspect of food cost reporting is concerned with analysis. A catering business, unlike most other businesses performs a dual function: production and selling. Furthermore, many catering establishments are highly departmentalized, especially large hotels and industrial canteens. The assortment of production (large menus) changes from day to day. All these factors mean that from the point of view of control; analytical reports showing separate results for each branch of the catering operation are necessary. The assessment of results is concerned with an appreciation of how far the actual results of food operations correspond with the actual results. This means that assessment is not possible without a yardstick for measurement. We could assess current results in relation to those of previous food cost review periods or we could assess current actual results in relation to budgeted results. Obviously, the second is the preferred one.

This brings us to the *last* stage: corrective action. Surely, any action that is taken following receipt of a food cost report depends on circumstances and reasons of each case. Therefore, it is difficult to lay down specific guidelines for corrective action and it here that the manager's tact and experiences as well as his feel for the job come into play. Questions of praise, reprimand, authority and responsibility are very largely a matter of human relations.

CHAPTER2 KITCHEN STEWARDING

- 2.1 Importance of kitchen stewarding.
- 2.2 Hierarchy of kitchen stewarding.
- 2.3 Functions of stewarding Manager.
- 2.4 Equipments found in stewarding department.
- 2.5 Garbage Disposal

KITCHEN STEWARDING

Kitchen stewarding department is the very important part of the hotel industry but is often a neglected and underestimated area of operations in any catering organizations.

However, it is realized that how important a section it is, only when delays are caused in service and production due to uncleaned utensils, unwashed plates, crockery and cutlery for service and for kitchen purpose. Poor attention paid to this section often causes operational delays. Which brings down the efficiency of the entire F & B department. This may lead to guest dissatisfaction, decrease of sale, increase in budget for service equipment and a lowering of departmental profits.

Each and every department is interconnected therefore in a successful and complete operation the stewarding department plays an equally important role in providing clean and hygienic equipments on time. In this operation work is divided into 2 parts one is cleaning of kitchen and it's equipment and back of service area.

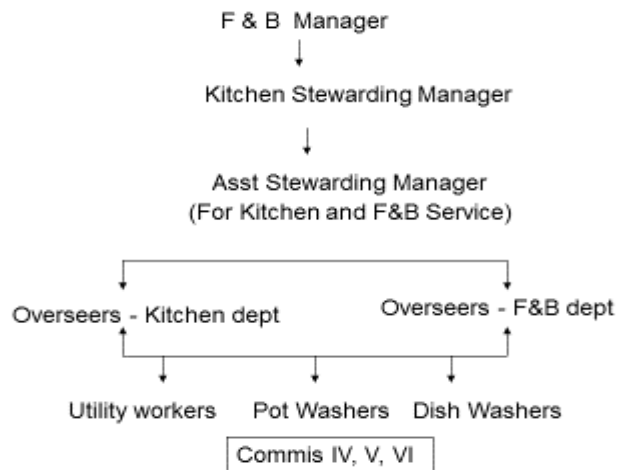
IMPORTANCE OF KITCHEN STEWARDING

The department is primarily concerned with the storage, maintenance, cleanliness and issue of cutlery, crockery, hollowware, chinaware, glassware to the restaurants and kitchens.

The main duties to be carried out by the Kitchen stewarding dept. personnel is as follows:→

1. Handling stocks of small operating equipments like cutlery, crockery, glassware, kitchen equipment etc.
2. Cleaning and washing of all such operating equipments.
3. Washing and cleaning of entire kitchen and f & B department.
4. Coordinating the securing of kitchen equipment with the maintenance department.
5. Planning the requirement list and purchasing orders for all small operating equipment and helping the F & B manager with budget in this area.
6. Garbage clearance operations from all F & B areas.
7. Ordering clearance operations from all F & B areas.
8. Handling polishing & buffing of silver ware.
9. Minimizing the breakages and losses.
10. Kitchen pot washing operations.
11. Kitchen stewarding is also responsible for pest control activity of the kitchen.
12. It procures, installs, and service gas connections and coal supply for cooking. The department would ideally have a large store for kitchen and service equipment, dishwashers and pot washing section

Hierarchy & Staffing of Kitchen Stewarding Department.



“Overseers means Mukadams”

Depending on the size and type of establishment the no. and brigade of stewarding department varies

Kitchen stewarding Manager is responsible for planning, organizing, directing and controlling the stewarding activity. He would control the kitchen stewarding stores and ensure that the kitchens and the restaurants get their needs smoothly.

Overseers (Mukadams): this is a supervisory level responsible for the shift. Stewarding activity is a 24 hr activity in a busy hotel.

Utility Workers: these are the cleaning brigade, who clean kitchens and equipment and do other heavy work.

Dish Washers: they operate the dishwashing machine that cleans all service ware.

Pot washer: they clean large pots and cooking utensils of the kitchen using jet water sprays.

Kitchen porter: is the title given by small independent hotels to utility workers who do multi tasks.

CLEANING OPERATIONS-----

- There are two kinds of cleaning ---1) Daily cleaning 2) special or Spring cleaning
- Stewarding manager make a definite program with one overseer for the above cleaning.

EQUIPMENTS FOUND IN STEWARDING DEPT

- Dish washing machine
- Glass washing machine
- Neptune high pressure machine (120 lb/sq inch)
- S.S. trolleys
- Glass trolleys
- Glass racks
- Burnishing; Silver plating machine (for EPNS; silverware)
- Hose pipe
- Hot water injection type cleaning machine
- Three sinks unit or chambers.

Cleaning of the above service areas is accomplished by the following equipments and required staff and as per the drafted program

- Liquid detergent all purpose
- Abrasive powder like Vim powder
- Chlorine base detergent like Clorax
- Phenyl (anti bacterial agent)
- D'spot (for removing carbon formation—Degreasing)
- D'scale (for removing scales fromboilers and dish washing machines)
- Mops
- Rubber squeezers
- Dusters
- Scorch pads
- Glass brushes
- Hard brushes
- Steel scrubbers
- Sponge/ Plastic scrubbers etc

Garbage Disposal

Kitchen stewarding department is 24 hrs Operational. The staff is more in number for night shifts for floor and for equipment more in the day time. Every food service operations has different requirements for waste disposal and many factors must be evaluated before designing a system to handle this function which depends upon amount of waste generated, type of waste, cost of destroying waste and dumping frequency of paper.

Types of Hotel waste: Hotel waste comprises of two components,

- 1.Biodegradable (Wet) waste: The wet waste comprises of food, vegetable and non veg waste
- 2.Non biodegradable (Dry) waste: the dry waste comprises of plastic bottles, papers, plastic wrappers, etc.

The following processes can be followed for garbage disposal:

- **Compaction:**→ The use of compaction is usually considered where large volumes of disposables are to be handled. Compacters reduce the volume of waste so that it can be handled in smaller quantities. The weight of the compacted waste should be less than 50 pounds (23 Kg.)
- **Incineration:**→ It can be used only if the amount of garbage which has to be burned is of a great volume and if it is economically viable while installing an incineration machine in the department. The pollution ordinance should also be checked.
- **Grinding:**→ Garbage grinding is generally allowed in areas in municipal sewage system.
- **Pulping:**→ Waste pulping creates a liquefied waste by using heavy duty grinders with a recirculation water system. The liquefied waste is then passed through a water extractor where it is reduced to a semidry pulp and then stored in bins. Metal and glass cannot be processed in this way.

Some methods for management of Hotel Restaurant and Club food waste could be as follows :

1. **Bio Sanitizer by Excel Industries :** Excel Industries Ltd. supplies machines of capacity 500kg, per day, 1 tonne per day and 3 tonnes per day machines along with biosanitizer. These machines can crush the food waste to 1/3rd of the original volume and odourless compost produced can be used as manure after curing.
2. **Biomethanation :** Biomethanation Plants of capacities 100 -500 kg per day can be installed in the premises of hotels if adequate space is available. Gas generated can be used for cooking.
3. **Composting/ Vermicomposting** – Options of composting/vermicomposting could be explored.

Chapter3 Sandwich

- 3.1 History of Sandwich
- 3.2 Components of a sandwich
- 3.3 Types of sandwich
- 3.4 Guidelines for preparation and storage of sandwich
- 3.5 Accompaniments and Dips

The honour of naming the famous luncheon item goes to the infamous Gambler John Montague, the fourth earl of sandwich. According to the legend, this gentleman refused to leave the gaming tables because he didn't want to break his winning streak. He asked that some bread filled with meat be brought to him, and the rage for sandwiches was born.

Sandwich comprises of the following Elements

1. Breads
2. Spreads
3. Fillings
4. Garnish

1. Breads

Breads for making sandwiches constitute a fairly wide range, including many ethnic specialities.

Sliced White and wheat Pullman loaves are used to make many cold sandwiches. The tight crumb of Pullman makes it a good choice for delicate tea and finger sandwiches.

Specific breads, buns, rolls and wrappers are used to make specific sandwiches

Bread choices include

- Pullman Loaves (White, wheat or rye)
- Flat breads including Foccacia, pita, ciabatta, and lavash
- Rolls including hard and soft rolls, hamburger, hot dog rolls, long rolls for submarine sandwiches.
- Wrappers such as crepes, tortillas, egg roll wrappers and phyllo.

2. Spreads

Spreads act as a barrier to keep the bread from going soggy. Spreads also add moisture to the sandwich and help it to hold together.

Spreads

- Creamy salad dressing
- Mayonnaise
- Plain and compound butters (Flavoured Butters)
- Mustard and ketchup
- Spreadable cheese (cream cheese, mascarpone cheese)
- Tahini, olive and herb spreads
- Nut butters
- Jelly, jam, compotes and chutneys
- Vinaigrettes

3. Fillings

Sandwich fillings may be cold or hot. In all cases they are the focus of the sandwich.

Choices of fillings include

- Sliced roasted and simmered meats (beef, corned beef, turkey, ham, pates, terrines and sausages)
- Sliced cheese
- Grilled, roasted and fresh vegetables
- Grilled, panfried burgers, sausages, fish and poultry.
- Salads of meat, poultry, eggs, fish and or vegetables

4. Garnishes

Lettuce, slices of tomato and cheese, onion slices and sprouts can be used to garnish many sandwiches. These garnishes become a part of the sandwich's overall structure

When sandwiches are plated, a variety of side garnishes may also be included

- Green or side salads
- Lettuce and sprouts
- Sliced fresh vegetables
- Pickle spears and olives
- Dips, spreads and relishes
- Sliced fruit

Types of sandwiches

1. Cold Sandwiches
2. Hot Sandwiches

1. Cold Sandwiches

- i. **Simple Cold sandwiches**: are those made with 2 slices of bread or 2 halves of a roll, a spread and a filling. They are called simple as they are made with just 2 slices. Simple cold sandwiches range from a single slice of cheese or meat or mayonnaise dressed salads, between two slices of buttered bread.
- ii. **Multi Decker Sandwiches**: are made from more than 2 slices of bread and several ingredients in the filling. The Club Sandwich is a popular multi decker sandwich, made of 3 slices of toast and filled with sliced chicken or turkey breast, mayonnaise, lettuce, tomato and bacon. It is cut into 4 triangles.
- iii. **Open Faced Sandwich (Smorresbrod)**: are made with a single slice of bread, like large canapés. The filling/topping should be attractively arranged and garnished.
- iv. **Finger and Tea Sandwiches** are small, fancy sandwiches. They are precisely cut into shapes and sizes that can be eaten in about 2 average bites.
- v. **Wraps** are sandwiches in which the fillings are wrapped. Like the Mexican flautas in which the fillings is wrapped in a tortilla.

2. Hot Sandwiches

- i. **Simple Hot Sandwiches** consists of hot fillings usually meats, between two slices of bread or two halves of roll. Hamburgers and hot dogs are the most popular hot sandwiches.
- ii. **Open Faced Hot Sandwich (Smorresbrod)** is made by placing the hot filling over one slice of bread and topping with sauce.
- iii. **Grilled Sandwiches** are also called toasted sandwiches that are buttered on the outside and then browned on a griddle or oven.
- iv. **Deep Fried Sandwiches** are made by dipping sandwiches in beaten egg and sometimes breadcrumbs and then deep frying.

Important points to be observed for the preparation and storage of sandwiches

1. Use stale bread (one day old), because it cuts better and finer.
2. The bread should have a close fine texture.
3. Thinly sliced bread appeals more than thick slices.
4. Crust should be removed neatly.
5. Use a sharp knife preferably with a saw edge and dip occasionally in hot water, when cutting sandwiches.
6. Store bread at 75°F to 85 °F.
7. Sandwiches may be stored for 12-24 hours at a temperature below 40°F.
8. Cream fresh butter as it facilitates easy and even spread.
9. Use only fresh ingredients Eg crisp lettuce, tomato, cucumber etc

10. The filling should consist ingredients which do not clash in flavour. eg avoid mixing sharp flavoured cheese with anchovies.
11. If the filling contains moisture, apply it just before serving, otherwise the sandwiches become soggy and will appear unappetizing.
12. If sandwiches are prepared well in advance, they should be wrapped mostly in foil or alternatively in a sterilized damp napkin; this keeps them supple and fresh.
13. For serving, they may be dressed on a paper doiley surrounded with lettuce leaves, chiffonade etc.

CHAPTER: 4 CLASSICAL GARNISHES

1. **ALEXANDRA**

Was the consort (the queen) of Edward VII, a king of Great Britain and Ireland in whose honor many dishes were named.

Indicates inclusion of asparagus tips.

i) Consommé Alexandra. Chicken consommé thickened with tapioca, garnished with shredded chicken, lettuce and

asparagus tips.

ii) Chicken Sauté Alexandra: - Cook the chicken breasts in butter, mask with thin soubise sauce reduced with cream, and garnish with asparagus tips.

2. **ALASKA**

Formerly called Russian America, it is a territory of the United States of America.

i) Sole Alaska – poached whole sole in white wine, half coated with a pink shrimp sauce and the other half with white wine sauce (made with fish liquor) garnished with poached oysters and noisette potatoes.

ii) Baked Alaska is Americas favourite dessert. It is frozen vanilla ice cream placed on a sponge cake base covered quickly with Meringue and baked in a hot oven to brown the meringue immediately

iii) Cantaloupe Alaska –cut cantaloupes into 2, fill with ice cream, topped with meringue and browned.

3. **ALLEMANDE**

In the German style, dishes garnished with sauerkraut or pickled pork or smoked sausages.

i) Consommé Allemande: Beef Consommé flavored with juniper berries thickened with tapioca flour garnished with julienne of red cabbage and slices of smoked sausages.

ii) Salad Allemande: slices of apple, new potatoes, beetroot, mixed with smoked herrings fillets and gherkins sprinkled with chopped parsley and vinaigrette dressing.

4. **AFRICAINE**

In the African style, as practiced by French chefs. dishes that bear this title must convey the style of foods consumed in the vast continent of North, West, Central and East Africa, and the Union of South Africa. It was however indiscriminately applied by the French chefs to dishes during the reign of Napoleon III when Meyerbeer's opera L'Africaine enjoyed great popularity. The principal ingredients used as garnish, giving dishes the right to bear this title are:-chicken, mushroom, tomatoes, eggplant, Curried and spiced foods; dishes garnished with savoury rice or flavoured with garlic or pimento and groundnuts. Coconut and pistachio nuts find their way in the sweet course.

5. **ANDALOUSE**

In the Andalusian style. A Spanish province.

i) Chicken Consommé: garnished with diced tomatoes, cucumber and cooked vermicelli.

ii) A cold sauce: Mayonnaise + tomato puree mixed with brunoise of capsicum.

6. **BERCY**

It is located in a suburb and market of Paris

- i) Potage: Puree of spring turnips thickened with cream and egg yolk.
- ii) Sauce: Thin, meat glaze with chopped shallots reduced in white wine and enriched with fresh butter, lemon juice and chopped parsley
- iii) Sole: Rolled fillets of fish, cooked under cover in butter with chopped shallots, mushroom liquor, white wine and chopped parsley masked with bercy sauce.

7. **BIGARDE**

A bitter Seville orange from Spain.

- i) Canard sauvage: wild duck served with orange salad and sauce bigarde.
- ii) Sauce: Gravy from duck, reduced with fine shreds of orange and flavoured with orange juice and little red currant jelly.

8. **BONNE FEMME**

(Good Woman) - Housewife style.

- i) Potage; Thick white bean and chicken soup with julienne of vegetables (leeks, sorrel, carrots and turnips)
- ii) Sauce: creamy white sauce made with finely chopped mushrooms and shallots, blended with butter, seasoned and thickened with cream and egg yolk and flavored with white wine.
- iii) Sole: Poached fillets of sole, cooked with chopped shallots, mushroom, parsley, fish stock and white wine. Masked with fish veloute and browned.
- iv) Poulet sauté: young chicken sautéed with rich gravy reduced with white wine, garnished with diced bacon and button onions.

9. **BOUQUETIERE (A LA)**

In the manner of flower girls, usually a garnish consisting of small fine vegetables dressed in small heaps around the meat

10. **BOURGUIGNONNE**

Burgundy style: As a rule dishes in the preparation of which burgundy wine is added

- i) Sauce Espagnole: Sauce flavored with finely minced shallots, Thyme, parsley, tarragon and mace. Burgundy wine is usually added.
- ii) Garniture for joint (roasts) – Button mushrooms and onions tossed in butter with small dices of lean bacon and burgundy wine.

11. **CARDINAL**

The highest dignitary in the Roman Catholic Church, after the pope. As a cardinal wears a distinctive scarlet dress and a scarlet cap, the kitchen term stands for any dish of that color. Usually lobster coral plays an important part in fish dishes.

- i) Consommé: Chicken consommé flavored with tomato puree garnished with finely cut julienne of vegetable strips of truffles and lobster dumplings.
- ii) Lobster: Cubed lobster mixture mixed with Sauce Americaine and filled in lobster shells, sprinkled with cheese and breadcrumbs and browned in the oven.
- iii) Sauce: rich, white fish sauce blended with pounded lobster coral to give it a correct colour, flavored with essence of anchovies and with tarragon.
- iv) Garniture for fish: diced lobster, truffle, shrimps or prawn and cardinal sauce.
- v) Dessert: Strawberries, peaches or pears poached in syrup and dressed on strawberry or raspberry ice cream with raspberry or strawberry sauce and sprinkled with sliced roasted almonds and little pistachio nuts.

12. **CARMEN**

Carmen Sylva was the nom de plume of Elizabeth, Queen of Romania, born 29th December 1843. Star role in the opera of the same name by Bizet which was first produced in Paris at the Opera Comedie on 3rd March 1875

Consommé-- clear beef consommé well colored with tomato puree garnished with star shapes of pimento, boiled rice and chervil.

13. **COLBERT**

Two famous dishes Sole a la Colbert and Consommé a la Colbert are in constant demand. The sole is named after Charles Colbert De Croissy, famous French diplomat while the delicious soup is named after Jean Baptiste Colbert, a statesman of France in the reign of Louis XIV. The consommé is distinguished by being garnished with poached eggs while the sole is noted for its stuffing of Maitre d' hotel butter being placed inside before being sent to the table.

- i) Colbert butter: Maitre d'hotel butter mixed with a little meat glaze and chopped tarragon/parsley.
- ii) Colbert sauce: Rich thin brown sauce and finely chopped herbs and lemon juice.
- iii) Consommé: Clear beef soup garnished with lightly poached egg.
- iv) Sole: Whole sole carefully opened along centre and backbone removed .Egg washed, crumbed and fried, stuff space with Colbert butter.

14. **CRECY**

Was the site of an important battle fought by Napoleon.

City and district of France, use of carrots

- i) Puree: of young carrots thickened with barley.
- ii) Consommé: rich beef consommé garnished with julienne of carrots.

15. **CHASSEUR**

A Chaser, a hunter, hunter's style from the famous chasseurs of Light Infantry or cavalry regiments who hunted for their food in the forest or on mountain heights.

- i) Consommé: a rich clear game soup garnished with game quenelles made from as many varieties of game as possible.
- ii) Sauce: Minced shallots and mushrooms sautéed and reduced with white wine and demi glaze, chopped parsley.
- iii) Poulet sauté : chicken sauté and finished in a casserole in the oven with tomatoes, brown chicken sauce, sliced mushrooms, chopped shallots and sprinkled with chopped parsley.

16. **DIEPPOISE**

In the style of Dieppe, a coastal city of northern France, seafood style.

- i) Crème: Rich fish veloute, garnished with shrimp tails, mussels, sliced mushrooms finished with cream.
- ii) Garnish: Shrimp tails, mussels and mushrooms rich fish veloute sauce.

17. **DIABLE, A LA**

Devil – devilled, a slightly spiced dish, sharp highly seasoned and accompanied with sauce diable

Diablotins: Small Dumplings, strongly spiced mixture with grated cheese, broiled / browned under grill. Used as an appetizer or soup garnish.

Sauce: Chopped shallots sauté, reduce in vinegar, plus demi glaze, red wine, Worcestershire sauce and cayenne pepper.

18. **A LA FRANCAISE**

French style – term applied to a number of French dishes cooked and prepared in a simple

manner and chiefly denotes a style of the district in which the chef or cook originally lived.

i) Sole a la Francaise: whole or filleted sole dipped in milk and flour, fried and served with tomato and anchovy sauce.

ii) Cotelettes d'agneau a la francaise- breaded lamb cutlets, fried in butter garnished with mixed garden vegetables and sauce Madeira.

19. INDIENNE A LA

Indian style as practiced by the French cooks

i) Croquettes a l'indienne: lobster and rice, seasoned with curry powder shaped into croquettes then fried and served with curry sauce.

ii) Potage a l'indienne—Mulligatawny soup with addition of coconut milk and cooked rice.

20. MILANAISE

In the style of Milan, an Italian city. The usual garnish is spaghetti with shredded tongue, truffles and mushrooms blended with a puree of tomato and sprinkled with grated Parmesan cheese.

Breaded meats have grated cheese mixed with bread crumbs and served with tomato sauce.

i) Choufleur Milanese—cooked buds of cauliflower sautéed in butter, with grated cheese, buttered and baked.

ii) Soufflé Milanese: lemon flavored soufflé, coated with biscuit crumbs and spiked with pistachio nuts.

21. NICOISE

In the style of Nice, city of southern France.

i) Consommé – Consommé with vermicelli and peeled tomatoes cut in small squares. Bring to a boil, serve grated cheese separately

ii) Sauce: Demi glace and tomato Puree.

iii) Garniture for fish - chopped tomatoes sautéed with garlic, Lemon slices and anchovy fillets topped with capers.

iv) Salad – French beans, tomatoes, potatoes, olives and anchovy fillets.

22. NOISETTE

Hazelnut. Also term, applied to small, round, boneless, fatless pieces of meat such as small loins of lamb, rolled, thin cuts into dainty rounds.

i) Butter – Clarified butter browned hazelnut color

ii) Sauce – supreme sauce, noisette butter, pounded hazelnut.

iii) Potatoes - small hazelnut sized potatoes, sautéed in butter or fried in deep fat to golden yellow.

23. PORTUGAISE

i) Consommé – A rich clear beef soup with stoned and halved prunes, diced ripe tomatoes and strips of leeks.

ii) Sauce – Tomato sauce reduced with rich veal gravy, flavored with garlic and onion and chopped parsley.

iii) Garniture – small stuffed tomatoes, chateau Potatoes with tomato sauce.

24. THERMIDOR

Name given during the French revolution to the 11th month of the year in the republican calendar.

Lobster – Roasted Lobster meat in a cream sauce with shallots, Parsley, Mustard, Tarragon meat, butter. Arranged in the shell sprinkled with grated cheese ground in oven.

25. WELLINGTON

Arthur Wellesley, first Duke of Wellington famous for victory over Napoleon at the battle of Waterloo in June 1815.

Beef – Seasoned beef wrapped in pate, duxelle and puff pastry. Baked and sliced and served with Madeira sauce. b1.

26. NANTUA

A town in France

i) Sauce: Bechamel reduced with rich fish fumet, finished with crayfish or prawn butter.

ii) Garniture for fish – Crayfish (or Prawns) tails with nantua sauce and slices of truffle.

iii) Omelets – filled with chicken and truffle salpicon & sauce nantua.

27. NEAPOLITAINE

In the style of Naples city of Southern Italy often applied to dishes containing 3 distinct colors – red, white and green...the colors of the Italian flag..

i) Consommé: Clear game soup garnished with shreds of ham and celery and a generous amount of Macaroni.

ii) Sauce: Brown sauce reduced with claret and red currant jelly with minced ham shallots grated horseradish flavored with bay leaf, cloves and thyme.

iii) Glace – Ice cream layered in 3 distinct colors and flavors in oblong moulds and cut into oblong slices.

28. PARISIENNE

In the style of Paris, dishes usually dressed elaborately

i) Consommé – Garnish of vegetables white leeks and custard royal.

ii) Sauce – Rich brown sauce with chopped parsley and shallots, Madeira and meat glaze with fresh butter fine herbs.

iii) Potatoes – Marble size potatoes, sautéed in butter sprinkle and chopped herbs.

iv) Chicken Sauté – jointed chicken sautéed in butter, seasoned with done, cooked in tomato sauce with fresh sliced mushrooms for 2 minutes. Serve Chicken dressed on a platter cover with sauce and garnish with Macaroni in cream.

29. POMPADOUR

Jeanne Antoinette Poison Le Normand D'etrores, Marquis De Pompadour. Mistress of Louis the XV of France, born 29th December 1721 had a great influence in the politics of France.

i) Consommé – Chicken Consommé garnished with turnips and carrots, pink, green and plain royal, fancily cut.

ii) Salad – Sprigs of cooked cauliflower, sliced potatoes, celeriac, seasoned with celery salt.

iii) Sauce - Allemande or Veloute with slightly cooked minced shallots, cream, egg yolks chopped mushrooms and parsley.

30. PRINCE, PRINCESSE, PRINCIERRE (Prince, Princess, Princely)

i) Consommé – Clear chicken broth garnished with diced chicken and asparagus points.

ii) Sauce – White fish sauce, enriched with crayfish, butter, finely shredded crayfish and truffles.

31. PRINTANIER, A LA PRINTANIERE, PRINTEMPS

Spring like, spring, spring time.

i) Potage Printanier – Soup made of spring vegetables.

ii) Consommé - A clear soup garnished with spring vegetables which may be ball shaped or cut finely.

iii) Sauce – Rich Veloute and puree of green vegetables with finely cubed green vegetables.

32. **REFORME**

After the style of the famous Reform Club where Alexis Soyer was the chef.

- i) Garnished for cutlets and entrees – julienne of ham, tongue, truffles, boiled white of egg, mushrooms, carrots and beetroot and gherkins + reform sauce.
- ii) Sauce: Poivrade sauce diluted with port wine and red currant jelly.

33. **VERONIQUE**

French form of Veronica, characterized by use of seedless grapes.

Sole – Rolled, poached fillets dressed with 3-4 grapes (peeled and piped) on each and coated with a blend of sauce Hollandaise and sauce Vin Blanc.

34. **WALDORF**

One of New York's famous Hotels. The Waldorf Astoria, the old Waldorf having being names after the village of Waldorf near Heidelberg, Germany.

- i) Salad – Juliennes of celery, diced apples, mixed with mayonnaise, set on a bed of lettuce, sprinkled with chopped walnuts.
- ii) Eggs – Poached eggs on a canapé spread with foie gras and a mushroom on top. Served with Madeira sauce and truffles.
- iii) Tomato: filled with Waldorf salad.

35. **MALTAISE**

Pertaining to the island of Malta.

- i) Potage Maltaise – A thin veal soup with a garnish diced oranges a little shredded capsicum, chillies and very small julienne of orange peel.
- ii) Ris-de Veau Maltaise — braised with béarnaise sauce decorated with the Maltese cross in Forcemeat.
- iii) Sauce maltaise - hollandaise + blood orange juice

Chapter 5 Hors d'oeuvres

- 5.1 Definition and history
- 5.2 Guidelines for the preparation of Hors d'oeuvres and Amuse Bouche.
- 5.3 International Hors d'oeuvres(Hot & Cold)
- 5.4 Russian, Italian, Spanish, English, Swedish, Indonesian,
- 5.5 Japanese, Greek

HORS D'OEUVRE AND APPETIZERS

Hors d'oeuvre

A French term, used to describe small portions of very flavorful Food items served either before the main meal, lunch or dinner, or as the first course of the meal.

The term Hors d'oeuvre translates "outside the work".

The Hors d'oeuvre is a very small portion which is light and delicate, flavorful and attractive. A Hors d'oeuvre is served to stimulate appetite for the meal to come.

Appetizer

This American term describes a small portion of very flavorful food or drink used to stimulate the appetite at the beginning of the meal. It has the same basic meaning as the Hors d'oeuvre.

Hors d'oeuvre may be classified in various ways:

1. Hot and Cold hors d'oeuvre
2. Vegetarian and Non vegetarian hors d'oeuvre
3. Classical and Contemporary hors d'oeuvre
4. Hors d'oeuvre Singulaire and Compound hors d'oeuvre

However, a more comprehensive classification would include:

1. Meat based hors d'oeuvre
Pate, Terrines, Sausages (salami and mortadella), Ham
- 2 Fish based hors d'oeuvre
Oysters, Caviar, Roll mops, Snails, Prawn cocktail
- 3 Egg based hors d'oeuvre
Egg mayonnaise, stuffed eggs, devilled eggs, Gulls/Plovers eggs
- 4 Vegetable based hors d'oeuvre : Asparagus, Artichokes, Corn-on-the-cob
- 5 Fruit based hors d'oeuvre : Melon, Grapefruit, Florida cocktail

The major division in categories of Hors d'oeuvre is the temperature at which they are served – cold and hot

1. **Cold Hors d'oeuvre**
2. **Hot Hors d'oeuvre**
3. **Miscellaneous Hors d'oeuvre**
4. **International Hors d'oeuvre**

There are further classifications within these major categories

I. Cold Hors d'oeuvre

1. Hors d'oeuvre a la Française
2. Finger foods
3. Crudités
4. Canapés
5. Barquettes & tartlets
6. Choux puffs and carolines
7. Sandwiches
8. Spreads & Dips
9. Cheese
10. Caviar

I. Cold Hors d'oeuvre

1. Hors d'oeuvre a la Française

Hors d'oeuvre a la Française is the general term for Hors d'oeuvre presented in a small oblong dishes called as "RAVIERS". A variety of hors d'oeuvre are served in the rapiers. The normal number of variety served to the guest is 6 to 8.

2. Finger Foods

As the name implies, these are small portions of food prepared and or portioned so that they can be picked up with fingers. They are most appropriate for pre meal receptions where plates and service ware are not wanted.

There are basic principles for proper preparation and presentation of finger foods:

1. Finger food composition should be such that the fingers are left clean after eating. This is done by –
 - a. A dry base to handle it by such as a canapé.
 - b. Use of skewers or tooth picks for items such as sate, shashlik or atteraux (Crumb Fried).
2. They should be neat and easy to handle.
3. They should be only one or two bites in size.
4. The majority of finger foods are served cold. However few are served hot. A toothpick, skewer or pastry crust is usually used to keep the fingers of the guest neat and clean.

3. Crudités

Crudités essentially means food eaten raw, common usage of the term is normally limited to raw vegetables particularly for Horsd'oeuvre. This is one of the simplest Horsd'oeuvre. Vegetables often used for crudités are red, yellow or green bell peppers, carrots, celery stalks, summer squash, red radishes, Belgian endive, cucumbers and cherry tomatoes. These are cut into finger size pieces or decorative rounds and served with one or more varieties of dips or dressings.

4. Canapés

Canapé in the strict sense refers to a toasted or fried slices of crust less bread cut into a variety of shapes – round, rectangular, oval, triangle or other shapes. The term canapé refers to a small open face sandwich, which may be topped with an endless variety of savory food items.

A canapé is comprised of four parts:

1. Base
2. Spread
3. Main body
4. Garnish

1. **The base** – which would normally be bread – toasted or plain, white or brown. However, a variety of other base ingredients could also be used – puff pastry, flaky pastry, short crust, pizza dough, choux pastry, are some examples of the variety that can be used. This serves as foundation for the canapé.
2. **The spread** : the spread has following functions.:
 - a. Spread add to the flavoring and moisture to the canapé.
 - b. Spread acts as the glue helping to hold all components of the canapé together which makes it easy to eat with fingers.
 - c. Spread provides a fat barrier to prevent the base from becoming soggy and limp from the juice of main body.
 - d. E.g. Cream, butter, mayonnaise etc.
3. **The Main Body** : This part of the canapé is almost savoury food item such as sliced cold meat, meat or seafood salad or sliced vegetables . the main body gives the canapé its particular flavour and character. Cuts of main body should be consistent
4. **Garnish**: Garnish of canapé add to eye appeal It should enhance but not over shadow the main body. Garnish can be small leaf of herb or piece of food which is in keeping with the canapé as whole.

5. Barquettes & Tartlets

These are miniature pie shells made from a short (high fat content) pie dough. The shells are filled with variety of fillings. These can be range from hot finely diced mixtures to cold mousses. Shape is distinction in this type of Hors d'oeuvre.

Tartlets are round like miniature tart. **Barquette** are elongated diamond cut, similar to a marquise cut. They resemble a miniature boat shape. The filling of barquettes and tartlets are basically interchangeable. However, traditionally the barquette shape crust (boat like) has been used for fish and seafood fillings. The advantage of both crust is the ability to present more moist types of finger food. The food can have a high degree of sauce in it since the filling is held in between dry walls of crust protecting the guest's fingers.

Storage: Barquettes and Tartlets can not be filled as far in advance as most canapés. When filled and stored in the refrigerator. They draw moisture from both the fillings in them and the air around them. They will become limp and soggy and will loose shape quickly. Before being filled, the shells should be covered and stored in a dry area at room temperature.

6. CHOUX PUFFS & CAROLINES

Choux Puffs also called petit choux and Carolinas is small crust made from unsweetened choux paste, pate a choux. Choux Puffs are shaped like little balls, miniature cream puffs; Carolines are slightly elongated like miniature éclair. Storage of these, the shells should be covered and stored in a dry area at room temperature

7. SANDWICHES

This is most common version of finger food. They are divided in three categories Tea sandwiches, Fancy sandwiches & Smorrebrod sandwiches

- **Tea sandwiches:**- Tea sandwiches are made with two pieces of bread. They are usually eaten at tea time and are well suited as horsd, being small and delicate. The filling in these is usually very finely chopped and mixed with butter or cream cheese. The desired size is no more than 1 ½ x 3 x ½ . an option to finely chopping the filling for the sandwiches is to use meats or vegs sliced paper thin Ham, chicken, cucumber, cheese and watercress are commonly used.
- **Fancy sandwiches** are variations of those prepared as tea sandwiches. The filling used is almost as fine as puree. They can also be made with vegs and meats sliced paper thin pastel colored bread may be prepared from dough, which is colored with edible food color prior to being baked. The method of assembling them is to give fancier results.
- **Smorrebrod sandwiches** means butter bread. This is a Danish open face sandwiches using substantial pieces of meat, fish or vegetables. These are artfully arranged on a piece of bread. Traditionally they are sized to be a meal in themselves. However they are usually adopted is size to serve as horsd'oeuvre

8. **Spreads & Dips:** Spreads and dips are not by themselves a finger food but are served with horsd'oeuvre. The difference between spreads and dips is consistency. A dip is a mixture that is loose or soft enough to cling to an item dipped into it. Spreads are stiffer, harder more solid mixtures.

- **Spread examples:** Rilette which can be served with croutons, crackers, slices of baguette; Cream cheese spreads etc
- **Dip examples:** yoghurt, sour cream, mayonnaise etc

9. Cheese

Cheese is a rich source for Hors d'oeuvre. If there is a meal to follow it should be limited

Types of cheese are listed below

1. **Unripened cheese:** Cottage cheese, Ricotta cheese (Italian Cottage cheese), mascarpone (Italian cream cheese), mozzarella (a popular cheese widely used for pizza and italian dishes), feta (a crumbly cheese from greece)

2. **Semisoft cheese:**

Bel Passe and Fontina from Italy,
Port Salut from France,
Munster and Brick from America.

3. **Soft Ripened Cheese**

Brie and Camembert from France,
Liederkrantz from America,
Limburger from Belgium.

4. **Hard ripened Cheese**

Cheddar is an English invention, but more popular in America.
Edam and Gouda from Denmark,
Gruyere from Switzerland.

5. **Blue Veined Cheese**

Roquefort from France, Stilton from England, Gorgonzola from Italy.

6. **Hard Grating Cheese**

Parmesan and Romano from Italy.

10 Caviar

Caviar is an ultimate Hors d'oeuvre.

Caviar is the process roe (egg) of the sturgeon fish.

Types of caviar

- Beluga Caviar – colour of the roe ranges from light steel grey to dark grey
- Osetra Caviar – colour of the roe is brownish with a golden tinge.
- Sevruga Caviar – colour of the roe is dark brown.

Caviar is served on a bed of crushed ice. Toast points, brioche or blinis are often served as a base for a caviar canapé.

2. Hot Hors d'oeuvre

1. **Attereaux**
2. **Barquettes & Tartlets:**
3. **Beignet (fritter):**
4. **Bouchee**
5. **Brochette**
6. **Rissoles**

1. ATTEREAUX:-

They consist of small identically sized slices of various food items placed on a wooden or bamboo skewer. The attereaux are coated with a reduced sauce such as béchamel or veloute. After chilling to allow the sauce to set. They are breaded with the standard breading of egg and bread crumb. They are deep fried for immediate service

Classically bamboo skewers of the attereaux are removed and replaced with the decorative metal skewers of the same name. They are arranged in crown by sticking them in a large crouton or rice mould. Contemporary presentation is the arrangement of attereaux on a napkin and garnish with fried parsley. .

2. BARQUETTES & TARTLETS:-

The same method used for this item in a cold hors d'oeuvre can be used for hot. Bake the shells blind and fill them close to service with puree mousse finely diced mixture or ragout.

3. BEIGNET (FRITTER):-

These terms describes an item or mixtures of ingredients dipped in batter and deep fried .

Some examples are beignets of diced ham, potato, cheese, aubergines, etc. These are dipped in batter and fried.

Storage of fritters is not possible. The batter can be made in advance, however dipping and frying is done just before service.

4. BOUCHEE:-

Bouchee means “mouth” or mouthful. It is similar to a miniature “vol-au-vent” which is a puff pastry shell. The size of the bouchee depends on what is needed. They can range in a size from 1 and 1/2 diameter with anything above 3 inches being considered “vol-au-vent”. The familiar shape of bouchee is round they can be made oval square and triangle. Or special shape like flowers and fish. Bouchee are baked blind and then filled after baking these item keep well when wrapped airtight. They can be stored at room temperature for 5-7 days for longer storage they should be frozen.

5. BROCHETTE (Shashlik)

The preliminary preparation of brochette as a Hors d’oeuvre is like that the attereaux. However, a brochette is not coated with sauce and breadcrumbs. Brochette is grilled or broiled instead of deep fried in normally marinated meat or sea food interspersed on a skewers with a colorful vegetables. Brochette are usually served with compound butters or piquant sauce suitable for a boiled item . An examples for a Hors d’oeuvre brochette is small pieces of beef tenderloin marinated in a teriyaki sauce skewered with alternating pieces of red and yellow peppers, pearl onion and mushrooms.

6. RISSOLE:-

The rissole is a semicircular pocket puff or unsweetened pastry dough filled with diced mixture or occasionally force meat . It is deep fried , the filling should be flavorful enough to overcome that masking of the fried outer coating. Rissoles freeze well but should be defrosted unwrapped before cooking. This hors d’ oeuvre is served as a finger food.

3. Miscellaneous Hors d'oeuvre

A great variety of other foods, both hot and cold can be served as Hors d'oeuvre.

Eg Barbecued spareribs, shish kebab, various kebabs, quiche, sushi, fried breaded scallops, shrimps, oysters or clams, mini pizzas, various flavoured mousses, relishes (pickled items such as olives, mangoes, peppers, onions etc), hard boiled eggs and stuffed eggs, deep fried chicken, cured meats such as salami, prosciutto, bologna and boiled ham etc

International Appetizers

1. **Russia** : the Russian "**Zakuski**" are cold Hors d'oeuvre of the canape variety. The canape topping is of smoked fish and scrambled eggs and is coated with aspic jelly.
2. **Italy**: The Italian "**Antipasto**" means before the pasta. A typical selection will include marinated mushroom, sliced salami, prosciutto ham, smoked sardines anchovies and roasted red peppers.
3. **Spain**: Spanish "**Tapas**" means lid. The name comes from the practice of placing a piece of bread, tapas, over the wine glass to keep out flies. Today it refers to a variety of items such as kidney beans in vinegar sauce, small meatballs, pickled cauliflower etc
4. **Japan**: Japanese **Sushi** is considered by many as the national dish of Japan
5. **Greece**. Greek "**Mezes**" is equivalent of appetizer.

- **Nori**: is the Japanese name for various edible seaweed species, sometimes called **laver**. The term nori is also commonly used to refer to the food products created from these "sea vegetables", similar to the Korean gim. Finished products are made by a shredding and rack-drying process that resembles papermaking. Japan, Korea, and China are the current major producers of nori, with total production valued at up to US \$2 billion per year.

UNIT 3

Chapter 6 Non Edible Displays

- 6.1 Ice-carving
- 6.2 Tallow sculpture
- 6.3 Fruit and vegetable displays
- 6.4 Salt dough
- 6.5 Thermocol work
- 6.6 Sugar & Chocolate Display

Non-Edible Displays

Although food holds the spotlights in all buffet presentations and the objective of buffet planning must be to achieve visual beauty both in the artistic item of edible food and in the arrangement of many dishes on the buffet table, nothing heightens the beauty of the buffet more than an outstanding centerpiece made of ice, tallow, or other non-edible materials.

The guests should be able to identify the theme of the buffet at a glance, just by observing the non-edible decorations that provide an eye-catching background for the presentation.

The Garde Manger staff can use various methods and materials to enhance the presentation of the buffet. The list of possibilities would include:

1. Ice carvings.
2. Tallow displays .
3. Salt dough sculptures.
4. Salt Carvings (Saltillage)
5. Sugar carvings (Pastillage)
6. Fruit and vegetable carving.
7. Decorative touches created with miscellaneous items that can be either made or assembled (flowers, styrofoam figures-thermocol figures, candles, posters and appropriate items from antique shops can be rented).

1. Ice Carving: The ice sculpture is the highlight of any buffet. Ice can be carved in any shape, size, or figure that fits the theme or occasion. For example; for Christmas there could be Santa Clause; for anniversary, a heart; for an Easter buffet, a Bunny.

The best temperature for ice carving is 28 degrees Fahrenheit or less. An ice block will melt at the rate of half inch per hour at room temperature. Each ice carving must have a base that is at least 4 to 5 inches high. In other words, when planning the carving, deduct 5 inches from the total height for the base. Be sure to draw the template accurately. If a piece of ice breaks off, dip each broken edge into salt and press pieces back together for few minutes; with the salt added the broken pieces will freeze together and hold.

A 100 to 300 pound block of ice, 40 inches high by 20 inches wide by 10 inches thick can be purchased for ice carving.

2. Tallow Display: When deciding on the selection of a pattern for a tallow display piece, it is essential that the display piece chosen matches the theme of the food design or buffet.

A French restaurant serving a French buffet will add effectiveness to the presentation by displaying a bust of Napoleon or Escoffier or the Eiffel Tower. Such displays can be used over and over, but they should be covered with transparent wrap when not in use as dust tends to stick to them.

To be successful in the exhibition of tallow display it is essential the person making the tallow display should have a photograph or the model of the piece to be made.

How is Tallow prepared?

The proportion of ingredients used for preparing tallow display are as follows;

1/3rd Bees wax

1/3rd Paraffin wax

1/3rd Rendered beef fat (tallow)

All the above ingredients are melted together in a pot then allowed to cool at room temperature. When the tallow is completely cold figures can be carved out. Great care should be exercised while carving as the tallow is brittle and may break.

What is Beeswax?

Beeswax is a natural wax produced in the bee hive of honey bees

Typically, for a honey bee keeper, 10 pounds of honey yields 1 pound of wax.

What is Paraffin Wax?

In chemistry, paraffin is the common name for the alkane Hydrocarbons

Uses of Paraffin

1. **Candle-making**
2. **Coatings for waxed paper or cloth**
3. **Food-grade paraffin wax:**
 - a. **Shiny coating used in candy-making; although edible, it is nondigestible, passing right through the body without being broken down**
 - b. **Coating for many kinds of hard cheese, like Edam cheese**
 - c. **Sealant for jars, cans, and bottles**
 - d. **Chewing gum additive**

What is Tallow?

Tallow is a rendered form of beef or mutton fat, processed from suet. It is solid at room temperature.

3. Salt dough sculptures

Basic salt dough: The following ingredients are used for making basic salt dough for sculptures

1 cup cold water

1 cup corn starch

2 cups of warm popcorn salt. (Popcorn salt- superfine grains of salt)

Method

Combine the water and corn starch, mix well over medium heat, stirring constantly to a very thick paste. Knead 2 cups of popcorn salt in to hot corn starch mixture.

For brown color add some soya sauce to the water. To make brown paint, brown corn starch to various shades or light and dark brown and mix with water and some gin.

When sculpture is finished, use a brush to paint it with the corn starch mixture.

To create successful sculptures:

1. For salt dough sculptures a good solid metal armature is needed to support the weight of the sculpture.
2. Cover the armature with aluminum foil to create desired shape.
3. Cover aluminum foil with thin sheets of salt dough. Dry, repeat, and dry again.
4. Finish details on the 3rd layer of salt dough. Dry and paint with brown corn starch color or just with herbs or spices.

4. Salt carvings (Saltillage): Saltillage has the same appearance and texture as pastillage.

Any small animals or birds, flowers, mushrooms, umbrellas, or chef hats, or other decorations that you have already made of marzipan or pastillage can be made of saltillage.

Saltillage recipe:

Ingredients:

Gelatin	6 ounce
Boiling water	8 Ounce
Corn starch	3 lb
Salt	1 lb
Colorings	Turmeric, papprika, confectioners colors

Method: Dissolve the gelatin in boiling water and let cool. Place corn starch and salt in a mixing bowl and stir in liquid gelatin a little at a time until you get a smooth paste. When you notice that the saltillage clears the sides of the mixing bowl, it is ready. Add desired colorings. Roll in to clear plastic and store in air-tight container.

5. Sugar Carvings (Pastillage)

- A thick sugar paste, similar to gum paste, is molded into shapes. When dried, it is hard and brittle. Made with gelatin, water and confectioner's sugar, it hardens quickly and can be shaped for a short while by hand, and after hardening, with electric grinders, cutters, sandpaper and assorted files.

CHAPTER7 USES OF WINES, HERBS AND SPICES IN COOKING

Cooking with Wine

Wine is classified in three major categories:

1. Table wines
2. Sparkling wines
3. Fortified wines.

Table wines, also called still or natural wines, are consumed mostly with food, they tend to compliment the meal.

Sparkling wines, for example champagne is distinguishable by its effervescence and is drunk for the most part on festive occasions such as weddings, birthdays, and during the holidays.

Fortified wines, such as sherry or vermouth, is most commonly drunk before or after meals and it is also frequently used in cooking.

Table wines are further classified by color, as red, white, or rose (pink); and by character, as sweet or dry. Red wines are made from the skins of dark grapes. White wines may be made from ^white^ (that is, green) grapes or from dark grapes, but with white wine the grape skins and pressed juice do not come into contact unlike ^red^ wine. True rose wines are the products of dark grapes; their skins remain in contact with the juice only until it has turned into a pale pink.

Wine has the following uses in the kitchen –

1. as a marinade ingredient
2. In the preparation of sauces
3. Aids preservation
4. In the preparation of gravies
5. Flambéing
6. As cooking liquids

1. FOR MARINATING MEATS

Wine is acidic in nature which has a tenderizing effect on heat and unlike raw papaya it ensure that the meat does not dry up. Wine also hops in reducing the cooking time without sacrificing the flavour.

2. FOR MAKING SAUCES

Wine added while cooking sauces to give a gentle flavour to it. The alcohol content of wine doesn't affect the taste and aroma of the sauce because the Alcohol evaporates and the alcoholic content gets reduced leaving the full flavour of wine behind.

3. FOR PRESERVATION

Wine acts as a excellent preservative. It is used in brines because of its aldehydes and acidic content. During preservation the colors of the meats and vegetables is restored by the acids of wine. This is called as "The fixing" of colors by wine.

4. TO MAKE GRAVIES

Wine is added to stews, casseroles and pot roast which ensure a rich flavour for some gravy. Wine can also be used deglaze the pan in which meals have been brown. The deglazing process involves pouring liquid or wine into the pan and spraying of the brown bits which are remaining in the pan. It removes all the juices which are sticking to the pan and then is poured over the completed dish.

5. FLAMBEE

Dry wines with high alcoholic content are used for flambee fruits and desserts. It may also be added to flambee sauces. Sweet wines are added to desserts for their gentle flavour.

6. AS COOKING LIQUIDS

Wines can be used as the liquids in meats and vegetable for cooking or stewing. Burgundy is used in stews made of rich beefs cooked with red wines and similarly chicken can also be cooked in red wine.

• How to cook with wine:

1. The function of wine in cooking is to intensify, enhance and accent the flavor and aroma of food - not to mask the flavor of what you are cooking but rather to fortify it.
2. As with any seasoning used in cooking, care should be taken in the amount of wine used - too little is inconsequential and too much will be overpowering. Neither extreme is desirable. A small quantity of wine will enhance the flavor of the dish.

3. The alcohol in the wine evaporates while the food is cooking, and only the flavor remains. Boiling down wine concentrates the flavor, including acidity and sweetness. Be careful not to use too much wine as the flavor could overpower your dish.
4. For best results, wine should not be added to a dish just before serving. The wine should simmer with the food, or sauce, to enhance the flavor of the dish. If added late in the preparation, it could impart a harsh quality. It should simmer with the food or in the sauce while it is being cooked; as the wine cooks, it reduces and becomes an extract which flavors. Wine added too late in the preparation will give a harsh quality to the dish. A wine needs time to impart its flavor in your dish. Wait 10 minutes or more to taste before adding more wine.
5. Remember that wine does not belong in every dish. More than one wine-based sauce in a single meal can be monotonous. Use wine in cooking only when it has something to contribute to the finished dish.

6. Wine Reduction for Pan Sauces:

1/2 to 3/4 cup raw wine = 2 tablespoons of wine reduction

For ultimate flavor, wine should be reduced slowly over low heat. This method takes more time and effort, but will achieve a superior sauce because the flavor compounds present in the wine are better preserved.

Traditional formula for pairing wine with cooking:

Young, full bodied red wine	Red meat, red meat dishes
Young, full bodied, robust red wine	Red sauces
Earthy red, full bodied red wine	Soups with root vegetables and/or beef stock
Dry white wine or dry fortified wine	Fish/shellfish/ seafood , poultry, pork, veal
Dry white wine or dry fortified wine	Light/cream sauces
Crisp, dry white wine	Seafood soups, bouillabaisse
Sweet white wine or sweet fortified wine	Sweet desserts
Dry, fortified wine (i.e.: sherry)	Consommé, poultry, vegetable soups
Regional cuisine	Regional wine

Chapter7.1

USES OF HERBS IN COOKING

"Herb" typically form the leafy green parts of a plant, and **"Spices"**, form other parts of the plant, including seeds, berries, bark, root, fruit, and even occasionally dried leaves or roots.

A herb is a plant that is valued for flavor, scent, or other qualities. Herbs are used in cooking, as medicines, and for spiritual purposes.

Herbs can be used fresh and in dried forms

Classification of Herbs

Classification of Herbs according to usage:

According to the usage, the herbs are classified in four parts:

- 1. Medicinal herbs**
- 2. Culinary herbs**
- 3. Aromatic herbs**
- 4. Ornamental herbs**

- 1. Medicinal Herbs:** Medicinal herbs have curative powers and are used in making medicines because of their healing properties.
- 2. Culinary Herbs:** Culinary herbs are probably the mostly used as cooking herbs because of their strong flavors like mint, parsley, basil.
- 3. Aromatic Herbs:** Aromatic herbs have some common uses because of their pleasant smelling flowers or foliage. Oils from aromatic herbs can be used to produce perfumes, toilet water, and various scents. For e.g. mint, rosemary, basil etc.
- 4. Ornamental Herbs:** Ornamental herbs are used for decoration because they have brightly colored flowers and foliage like lavender, chives.

List of Herbs with explanation:

1. THYME:

Thyme is a good source of iron and is widely used in cooking. The herb is a basic ingredient in Greek, Lebanese, Italian, French, Albanian, Persian, Portuguese, Libyan, Spanish, Syrian, and Turkish cuisines, and in those derived from them. It is also widely used in Arab and Caribbean cuisines.

Thyme is often used to flavour meats, soups and stews. It has a particular affinity to and is often used as a primary flavour with lamb, tomatoes and eggs.

Thyme, while flavourful, does not overpower and blends well with other herbs and spices. It is a common component of the bouquet garni, and of herbes de Provence.

Thyme is sold both fresh and dried. The fresh form is more flavourful but also less convenient; storage life is rarely more than a week. While summer-seasonal, fresh thyme is often available year-round.

2. Oregano

Sometimes also known as **marjoram**

Oregano is a species of the **mint family** that is native to Europe, the Mediterranean region and southern and central Asia. It is a perennial herb (life cycle more than 2 years), growing from 20-80 cm tall, with opposite leaves 1-4 cm long. The flowers are purple, 3-4 mm long, produced in erect spikes.

Oregano is an important culinary herb. It is particularly widely used in Turkish, Greek, Spanish and Italian cuisine. It is the leaves that are used in cooking, and the dried herb is often more flavourful than the fresh.

Oregano is often used in tomato sauces, fried vegetables, and grilled meat. Together with basil, it contributes much to the distinctive character of many Italian dishes.

3. **Marjoram** is a perennial herb with sweet pine and citrus flavours.

Oregano is also called Wild Marjoram.

Marjoram is indigenous to the Mediterranean area and was known to the Greeks and Romans as a symbol of happiness.

Marjoram is cultivated for its aromatic leaves, either green or dry.

4. Mint is a aromatic, perennial herb.

The leaf, fresh or dried, is the culinary source of mint. Fresh mint is usually preferred over dried mint when storage of the mint is not a problem. The leaves have a pleasant warm, fresh, aromatic, sweet flavor with a cool aftertaste. Mint leaves are used in teas, beverages, jellies, syrups, candies, and ice creams. In Middle Eastern cuisine, mint is used on lamb dishes. In British cuisine, mint sauce is popular with lamb.

Mint essential oil and menthol are extensively used as flavorings in breath fresheners, drinks, antiseptic mouth rinses, toothpaste, chewing gum, desserts, and candies

5. Parsley

Parsley is a bright green biennial herb (2 years to complete its biological cycle). It is common in Middle Eastern, European, and American cooking. Parsley is used for its leaf in much the same way as coriander (which is also known as Chinese parsley or cilantro), although parsley has a milder flavor.

Green parsley is often used as a garnish. The fresh flavor of the green parsley goes extremely well with potato dishes (french fries, boiled buttered potatoes or mashed potato), with rice dishes (risotto or pilaf), with fish, fried chicken, lamb or goose, steaks, meat or vegetable stews.

6. **Chervil** is a delicate annual herb related to **parsley**. Sometimes called garden chervil, it is used to season mild-flavoured dishes and is a constituent of the French herb mixture fines herbes.

Sometimes referred to as "gourmet's parsley", chervil is used to season poultry, seafood, and young vegetables. It is particularly popular in France, where it is added to omelettes, salads and soups. More delicate than parsley, it has a faint taste of liquorice.

7. Rosemary:

Rosemary is a woody, perennial herb with fragrant evergreen needle-like leaves. It is native to the Mediterranean region.

The fresh and dried leaves are used frequently in traditional Mediterranean cuisine; they have a bitter, astringent taste, which complements a wide variety of foods. **A tisane** (Herbal Tea) can also be made from them. When burned they give off a distinct mustard smell, as well as a smell similar to that of burning which can be used to flavor foods while barbecuing.

Rosemary is extremely high in iron, calcium, and Vitamin B6.

8. **Basil:**

Basil is a tender low-growing herb. Basil is a culinary herb prominently featured in Italian cuisine, and also plays a major role in the Southeast Asian cuisines of Thailand, Vietnam, Cambodia, and Laos. The plant tastes somewhat like anise, with a strong, pungent, sweet smell.

There are many varieties of basil. That which is used in Italian food is typically called **sweet basil**, as opposed to **Thai basil, lemon basil and holy basil, which are used in Asia.**

Basil is one of the main ingredients in **pesto**—a green Italian oil-and-herb sauce. Its other two main ingredients are olive oil and pine nuts.

Basil seeds

When soaked in water the seeds of several basil varieties become gelatinous, and are used in Asian drinks and desserts such as falooda or Sherbet. Such seeds are known variously as **sabza.**

9. Celery:

All of the parts of a celery plant are usable and edible including the root, also known as celeriac, crisp stalks, seeds, and feathery green leaves. A specific varietal of celery, turnip rooted celery, is cultivated for its unusually large, knobbly, flavorful root. Celeriac can be included in mixtures of roasted root vegetables, and tends to have a more rich flavor than the stalks of celery. Celery stalks are long, green, and retain their crunchy texture after brief cooking. They can be eaten raw or cooked, and are often included on crudite platters and in stir fries and soups. Celery seeds are often dried for use in various cuisines. Raw whole celery is also used in blended green drinks.

Celery, onions, and carrots make up the French mirepoix, often used as a base for sauces and soups. Celery is a staple in many soups, such as chicken noodle soup. Celery is an important ingredient in Indian cuisines including in Indian Curry

10 Tarragon:

Tarragon is a perennial herb in the family related to wormwood.

Tarragon is one of the four fines herbes of French cooking, and particularly suitable for chicken, lasagna, fish and egg dishes. **Tarragon is one of the main components of Béarnaise sauce.** Fresh, lightly bruised sprigs of tarragon may be steeped in vinegar to impart their flavor.

11. Dill is a short-lived perennial herb.

Its fernlike leaves are aromatic, and are used to flavor many foods, such as cured salmon, borscht and other soups, and pickles. Dill is said to be best when used fresh, as it loses its flavor rapidly if dried; however, freeze-dried dill leaves preserve their flavor relatively well for a few months

12. Sage:

Sage is a small perennial evergreen shrub, with woody stems, grayish leaves, and blue to purplish flowers. It is a member of the mint family. It is native to the Mediterranean region and commonly grown as a kitchen and medicinal herb or as an ornamental garden plant.

As an herb, sage has a slight peppery flavor. In Western cooking, it is used for flavoring fatty meats (especially as a marinade), cheeses (Sage Derby), and some drinks. In the United States, Britain and Flanders, sage is used with onion for poultry or pork stuffing and also in sauces. In French cuisine, sage is used for cooking white meat and in vegetable soups. Germans often use it in sausage dishes. Sage is also common in Italian cooking. Sage is sautéed in olive oil and butter until crisp, then plain or stuffed pasta is added. In the Middle East, it is used when roasting mutton.

13. **Chives** are the smallest species of the onion family

Culinary uses for chives involve shredding its leaves (straws) for use as condiment for fish, potatoes and soups. Because of this, it is a common household herb, frequent in gardens as well as in grocery stores. It also has insect-repelling properties which can be used in gardens to control pests

14. Angelica

This herb is an aromatic plant from the Scandinavian countries (which was introduced to France by the Vikings and cultivated by the monks.

Its green stalks, are candied in sugar and used in cakes, ginger breads, puddings and soufflé's. Angelica pieces are dried and laid on a slab and dusted with castor sugar liquor manufacturers also used crushed stems or roots of angelica in the **production of** Melissa, Cordial, vespetro and **gin**.

15. Bay leaf

Bay leaf (plural bay leaves) refers to the aromatic leaf. Fresh or dried bay leaves are used in cooking for their distinctive flavor and fragrance in Mexican food. The leaves are often used to flavor soups, stews, braises and pâtés in Mediterranean Cuisine. The fresh leaves are very mild and do not develop their full flavor until several weeks after picking and drying

Harvesting and Storing Herbs

The optimum time to harvest herbs is in the morning, after the dew has evaporated, prior to the sun warming their leaves. Handle the herbs gently without bruising or injuring the leaves and stems. The distinctive oils that give herbs their aromas and flavors are volatile and can be destroyed if injured. Select just enough herbs to be used, dried or frozen, the same day. Herbs should look healthy, fresh and clean, without any type of discoloring.

Since the flavor and aroma of herbs deteriorates quickly after picking, be prepared to use them immediately. If you must store them for a few hours, keep them in the refrigerator in a plastic bag that is perforated and can breathe. When you are ready to use them, wash the herbs gently under cool, but not cold water and pat dry between paper towels.

Freezing fresh herbs is an easy way to store them for longer periods of time. Clean the herbs delicately, blot them dry, and remove leaves from the stalks. You can freeze them whole or chopped, packing into freezer safe bags or airtight containers. Chopped herbs that are to be used in soups or stews can be spooned into an ice cube tray, covered with water, and frozen. When you are ready to use the herbs, just remove what you need from the tray and add to the pot.

Uses of herbs

1. Herbs enhance the flavour and aroma of basic foods.
2. Herbs are used for medicinal purposes for their healing properties – herbs act as stimulants in various body functions like respiratory and digestive systems. Eg ginger, fennel, lemon grass, chamomile etc
3. Some herbs have astringent qualities which help precipitate protein and this tightens, contracts or tones living tissue. Eg. Peppermint
4. Aromatic herbs are used therapeutically for their aroma and also in making perfumes. Eg lavender
5. Pest control

Herbs are also known amongst gardeners to be useful for pest control. Mint, Spearmint, Peppermint, and Pennyroyal are a few of such herbs. These herbs when planted around a house's foundation can help keep unwanted critters away such as flies, mice, ants, fleas, moth and tick amongst others. They are not known to be harmful or dangerous to children or pets, or any of the house's fixture.

Spices

- A spice is a dried seed, fruit, root, bark, leaf, or vegetative substance used in nutritionally insignificant quantities as a food additive for the purpose of flavour, colour, or as a preservative that kills harmful bacteria or prevents their growth

Spices can be grouped as:

1. Dried fruits or seeds, such as fennel, mustard, and black pepper.
2. Arils, such as mace.
3. Barks, such as cinnamon and cassia.
4. Dried buds, such as cloves.
5. Stigmas, such as saffron.
6. Roots and rhizomes, such as turmeric, ginger and galingale.
7. Resins, such as asa foetida

Condiments

- A condiment is a relish, sauce, or seasoning added to food to impart a particular flavour or to complement the dish. Often pungent in flavour and therefore added in fairly small quantities, popular condiments include salt, pepper, ketchup, mustard, olive oil, vinegar and sugar.
- Usually applied by the diner at the table, condiments generally have the consistency of a thick liquid or paste and are served from a bottle, jar, or bowl. They may also be dry, such as a mixture of herbs and seasonings. Many condiments are available packaged in single-serving sachets, particularly when supplied with take-out and fast foods.
- Condiments are sometimes added prior to serving, for example a sandwich made with ketchup or mustard. Some condiments are used during cooking to add flavor or texture to the food; for example, barbecue sauce, teriyaki sauce, and soy sauce all have flavors that can enhance the tastes of a variety of different meats and vegetables.

CHAPTER8 ORGANOLEPTIC & SENSORY EVALUATION OF FOOD

ORGANOLEPTIC AND SENSORY EVALUATION OF FOOD

The most important thing to remember is applying chemistry to the food as the food must create pleasure to the consumer. This is dependent on the flavour, appearance, smell and texture of the food. All these are assessed by our senses to many scientists used complex and expensive equipments to measure the factors in food that determine the taste, aroma or tenderness. The process is based on objective assistant and is vital in product development. When referring to our senses we are concerned with visual, hearing, smell, touch and taste. Some scientist adds 3 more to this i.e. temperature, pain and balance. Except for balance all these senses are used to relay messages about the food. Taste and smell are the most important chemical receptors and are often used with the most expensive equipments found in food laboratories. Vision and smell operate at a distance meaning that an individual does not have to come in contact with the food to use these senses.

Examples of the messages that the sense tells us about the food are as follows

- 1} **Vision:** a) Colour of the product
b) Size
c) Shape
d) Freshness
e) Maturity
f) Quality

- 2} **Smell:** a) Freshness
b) Brightness
c) Character
d) Identification

- 3} **Hearing:** a) Sizzling related to temperature
b) Texture, crispness and crunchiness

- 4} **Touch:** a) Texture
b) Consistency
c) Ripeness
d) Mouth-feel

- 5} **Taste:** a) Salt
b) Sweet
c) Sour
d) Bitter

- 6} **Temperature:** a) Hot or Cold
b) Chilled temperature

- 7} **Pain** Chilly or Pepper

Flavour is a combination of smell, taste and mouth–feel.

The texture and the consistency can be found out by the mouth feel. Hotness or the burning sensation of pepper can also be found out by the mouth feel.

VISION:

Colour has an effect on the eye appeal, having an overall effect on the presentation of the food. The colour of the food is extremely important to our enjoyment of it. People are sensitive to the colour of the food they eat and will reject food that is not considered to have the accepted colour. For example, strawberries that have been preserved in sulphite lose their entire colour and appear white. If strawberries are to be canned or used in jam, artificial colour must be added before they are considered acceptable to eat. Colour is added to a wide range of food products to enhance attractiveness.

There is a strong link between the flavour and colour of the food. An ability to detect flavour of the food is very much connected with its colour and if its colour is unusual our sense of taste is confused. For example, if a fruit jelly is red, it is likely that the flavour detected will be that of red coloured fruit such as strawberry even if the true flavour is lemon or banana.

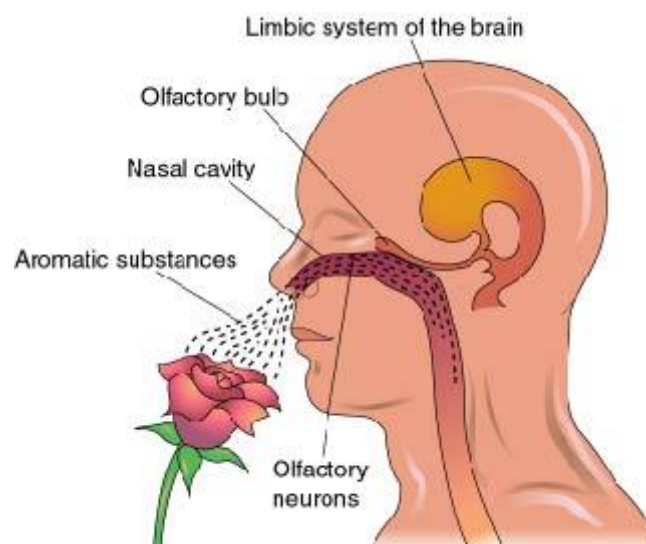
The depth of colour in the food also affects our sense of taste. We associate strong colours with strong flavours. For example, if a series of jellies all contain the same amount of given flavour, but are of different shades of the same colour, then those having a stronger colour will appear also to have a stronger flavour.

SMELL:→

Smell is a chemical sense that acts over a distance. Chemicals are detected by their volatile compounds, this means that they must evaporate and become air borne easily. Smell receptors are located in the back of nasal cavity, known as the “olfactory area”.

The air is able to reach the olfactory area through the nose and the mouth. Many of the characteristics are associated as flavours actually are related to smell rather than taste. When we eat food, the volatile components evaporate and reach the olfactory area through the back of the throat that connects the mouth and nasal cavity. When we have a cold, the membranes of the nasal cavity swell and prevent access to the area containing the smell receptors. We say that we cannot taste which actually means that we cannot smell the food.

The sense of smell is very sensitive and it can be divided into many basic types: Pungent, floral, peppermint, musky, putrid, camphoric, ethereal.



3) TASTE:→

Taste is another chemical sense, but unlike smell it does not work at a distance. The messages we receive from the taste are simpler than those of smell.

There are 4 basic tastes: Salt , Sweet, Sour, Bitter; Metallic and soapy tastes may be included.

Taste buds are located on the tongue. Babies and children have more taste buds than adults and the number decreases with age.

For a substance to give a sensation of taste it must be soluble in water. When we eat food some of it dissolves in the saliva which contributes to the taste sensation we experience. Our reaction to taste differs considerably. Many taste preferences are learned in childhood. We generally are more sensitive to bitter than any other tastes, meaning we are able to taste smaller amount of bitter substances as compare to sweet, salty and sour substances.

Taste is affected by several factors. Flavour enhancers For e.g. Msg or Mono sodium glutamate, increases the intensity of both salt ant bitter tastes and of meatiness.

The temperature of food also affects the way we perceive taste. We are more sensitive to taste when the food is between 22⁰ - 41⁰ C. Temperature above and below this range decreases the sensitivity of the taste buds. Examples of types of taste

- 1) Sweet → Sugar, saccharin, aspartame.
- 2) Salt → Sodium chloride or NaCl or other salts.
- 3) Bitter → Alkaloids (Caffeine)
- 4) Sour → acids, vinegar, lemon juice
- 5) Metallic→Potassium chloride found in some salt substitutes.
- 6) Soapy → After taste in baking powder goods.

4) TOUCH:→

Touch referring to sensory evaluation is **mouth-feel**, the way food feels in the mouth. Mouth-feel is very important when we assess or develop food products, recipes and dishes. Mouth-feel adds to the food acceptability. Texture is a message which we receive from mouth feel. This includes consistency, crunchiness, brittleness, chewiness, astringency etc. These sensations add greatly to our enjoyment of food.

Examples of textures encountered in food:

Cheese: texture can be solid, elastic, crumbly, creamy, melted, liquid, viscous

Sauces: texture can be thick, thin, lumpy

Vegetables: texture can be crisp, crunchy, soft

Soups: texture can be thick, thin, lumpy.

EVALUATION OF THE FOOD QUALITY

When the quality of food product is assessed by means of human sensory organs evaluation is said to be sensory or subjective organoleptic. Every time the food is eaten and the judgment is made.

The effective characteristics is not the property of the food but the subjects reaction to the sensory quality of the food. This reactions highly conditioned by a variety of psychological and social factors and in the final analysis., pays a vital role in the acceptance and the preference of food.

Psychological factors: In addition to color, odor, taste & mouthfeel certain psychological factors contribute to the acceptability of foods. Food is accepted when there is pleasant association.

Sensory tests are well integrated with the over all plan of development of the product, the sensory test plan as follows is completed in detailed before the samples are prepared & packed:

- 1) Definition of the specific objectives or question required to be answered by the tests.
- 2) The selection by appropriate methods
- 3) The number of evaluation.
- 4) Statistical design to decide the quantity of sample to be prepared.
- 5) Statistical treatment of the data.

Preliminary experimentation is required to decide the optimum state, quantity & presentation of samples. Homogeneity appropriateness & randomization are achieved to take care of different types of bias that could affect the judgments of personnel.

Requirements for conducting sensory tests:

- 1) Trained panel members.
- 2) Testing laboratory.
- 3) Sample preparation & presentation.
- 4) Techniques of smelling & testing.
- 5) Testing time.
- 6) Design of the experiment & analysis of the result.

Food tests: There are two types;

- 1) Preference tests
- 2) Difference tests

An acceptance of preference a test determines what a representative population prefers & requires large no. of people. Small panels are used primarily to detect differences in palatability factors of foods. They must also express preferences. Small panels may determine:

- a) The best processing procedures
- b) Preferable varieties
- c) Preferable cooking temperature with time for given temperature.
- d) The effect of substituting one ingredient in whole or in part for another, such as peanut, flour for flour, cabbage or sorrel for lettuce.
- e) The effect on quality of using different kinds of milk, eggs, flours, fats & shortening & sweetening in certain food products.
- f) The best storage temperature for fresh & frozen foods are the length of time that they may be stored at those temperatures.
- g) The effect of insecticides & fertilizers on flavor of foods.
- h) The effect of foods on flavors & keeping quality of meat. Small panels may also.
- i) Develop recipes to use products.
- j) Compare competitors products &
- k) Aid in maintenance of quality control of processors plants, food product, particularly when raw ingredients are obtained from a new source is changed.

Factors affecting accuracy of tests: The following factors of the experimental plan as having primary effect on the accuracy of the results are:

- a) The characteristics evaluated.
- b) Cooking of the sample.
- c) Quality of the foods

- d) Reference standards.
- e) Relications &
- f) Preparation of the product

Inter-relations of organoleptic factors: One of the main difficulties in evaluating sensory stimuli is inter relationship of the palatability factors. Considerable discipline may be needed to separate one quality factor from another. It may be difficult to score texture fairly when the ingredients of the product are very poor. Dryness of very well log***** because of difficulty of mastication, may make the meat appear tough.

Numerical scores: The no. of gradations in a scoring scale is important. However, the uses of only 5 scale intervals are recommended. The no. expressing the grade should be portioned to the quality of the property to the measured or an equal difference in scale evaluate.

SCORE CARD

CODE NO. : _____ DATE: _____

NAME OF SCORER: _____

	NAME OF PRODUCT	APPEARANCE (5)	CONSISTENCY/ TEXTURE (5)	FLAVOR		TOTAL (20)
				TASTE (5)	AROMA (5)	
1						
2						
3						
4						
5						

VERY GOOD- 5, GOOD- 4, ACCEPTABLE- 3, POOR- 2, NOT ACCEPTABLE - 0

List of Culinary Terms

1. Abatis — chicken giblets (Heart, liver, gizzard)
2. Agneau — Lamb
3. Aiguille-a-piquer — Larding needle
4. Airallas — cranberries
5. Aloyou — sirloin
6. Aiguille-e-Büder — Trussing needle.
7. Arêtes — Fish bones for stock
8. Ballontine — small galantine made from leg of chicken
9. Bavette — skirt, flank (cut of beef)
10. Bonne bouche — savoury tit-bit
11. Borde de lard — thin slice of fat (streaky) bacon
12. Bouchees/volauvents — Pastry casings
13. Büder — Truss
14. Broye — Bruised (meat actually blood clot)
15. Carapace — Shell of crustacean fish
16. Carcasse — carcass
17. Cerre — Best end (of Lamb)
18. Cervelle — Brain
19. Chapalure — Browned bread crumbs
20. Chau-froiter — cover with chaufroid sauce
21. Chipolata — small (pork) sausage (1/2 a cocktail)
22. Clou de girofle — clove
23. Cochon de lait — suckling pig
24. Contre filet — Boned sirloin
25. Corbeille — Basket
26. Corjervil —
27. Cornichon — gherkin
28. Cotelette — culet (a piece of meat with bone attached)
29. ~~Cotelette~~ Couronne — crown (made from ribs)
30. Crapaudine — spatchcock or squab (small bird split and trussed to look like a toad).

31. Creamux - creamy
32. Crepine - pigs caul (inner thing of stomach)
33. crepinette - a kind of sausage
34. Croquant - crisp and crackling (rind of pork)
35. Cru - raw vegetable salad
36. Cuillere - spoon
37. Decouper - carve
38. Degorger - whited by soaking (almonds)
39. Demi-devil - poultry stuffed by truffles
40. Deneuer - Remove sinews
41. Denoyerter - to stone (fruits e.g. olives, peaches)
42. Doree - golden (crust, surface)
43. Douilles - piping tubes for sausages
44. Eberber - Beard trim (mussels, oysters)
45. Ecaillage - Preparation of fish
46. Ecailler - scale (fish)
47. Este -
48. En croute - wrapped in pastry (crust)
49. En papillote - wrapped in butter paper
50. Epaulo - shoulder
51. Epices - spices
52. Epulcher - peel skin
53. Escargot - snail
54. Escroto - Endive leaves used in salad
55. Estomac - stomach
56. Farcir - to stuff
57. Faîne - flour
58. Fender - split (milk, cream)
59. Foncer - to line (patty tins)
60. Fouetter - whisk
61. Frappe - Iced, chilled

62. Fricandelle - garlic flavour steak of raw minced (german origin)
63. Gingembre - ginger
64. glaciere - ice box
65. Godiveau - force meat
66. Gout - taste
67. Graisse - fat, grease
68. Gras -
69. Gras double -
70. Grenadin - larded veal stock
71. Grellet - scrape
72. Grillade - grilling (meat)
73. Grosso piece - Joint
74. Jambon - Ham
75. Laitance - soft roe
76. Lattue - Lettuce
77. Madallion - round steak
78. Melange - mixture
79. Mignon - small fillet steak
80. Monter au beurre - add butter as a finishing for Sauces, gravies
81. Moutarde - mustard
82. Navarin - lamb mutton stew
83. Noisette - boneless chop, hazelnut
84. Noix - ~~cut~~ cushion of veal, nuts
85. Os a Moelle - Marrow bone / Bone marrow
86. Rauget - red mullet
87. ~~Rifroidir~~ Rifroidir - chill
88. Rognon -
89. Rognon - Kidneys
90. Roulade - meat / fish roll

- 91 Rouler - to roll
- 92 Salpicon - dices of meat (for vol-au-vents etc)
- 93 Saumure - Brine
- 94 Tasse - cup
- 95 Thon - Tuna
- 96 Timbale - mould (individual portion)
- 97 Trenche - slice
- 98 Trencher - to carve
- 99 Viande - meats
- 100 Vide -