
UNIT 6 FOOD MANAGEMENT: PURCHASE AND STORAGE

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6.1 INTRODUCTION

In the last unit we discussed the importance of menu planning, wherein we learnt that menu is the “heart” of any food service organization upon which all activity is centered. Once the menu has been planned, the next operation involved (in the production of a finished product from its raw material) in the food management in any food service organization is procurement.

You would realize that various types of products are available on the market shelf. Now then which product to buy, how to purchase foods and supplies in bulk in adequate amounts whenever needed and which is the best buying technique in order to suit the needs for the smooth running of the organization? We will learn about these aspects and about the procedures for selection of vendors, pin pointing food requirements and writing specifications for the types of purchases required. Once the purchases have been done, how are the food items to be received, stored and issued for supplies? What are the receiving procedures to be formulated and storage conditions of the store area, so that spoilage of foods once purchased is minimized. The quality of the finished products cannot be high if inferior food is purchased. In order to have an efficient and successful operation, there must also be a good system of control and records of item purchased, stored and used. This is the second aspect covered in the unit.

Objectives

After studying this unit, you will be able to:

- discuss the need for purchasing,
- describe the various types of buying and modes of purchasing,
- explain as to how to receive and store food items purchased, and
- maintain store room records for issuing of supplies.

6.2 PURCHASING: A FOOD MANAGEMENT ACTIVITY

Purchasing is an activity which is directed towards securing materials, supplies and equipment required for the operation of a food service organization. It represents the act of buying at a price, which will be profitable for the organization. In the broader sense the purchasing is a food management activity which involves planning, policy making and conducting research and development activity, required for proper selection of materials and source of purchase; following up to ensure proper delivery; and inspection for quality. In addition, it covers the coordination of activities of the related departments.

Purchasing for any food service establishment is the most primary step in the production and service/delivery of quality food. There are many people in the food service organization that take decisions as to what to buy and not to buy. These may range from dietitians in hospitals to food and beverage managers of a food service unit. However, the type of purchases in its quality should be utmost, for the quality of the finished food product. The person in charge of purchasing should have an understanding of the external market and how factors affect menu production and selection. In order to understand the concept of seasonality, they must be able to identify and evaluate a wide range of products. Food service purchasing requires knowledge of terminology, specifications, processing requirements, and a thorough objective and subjective assessment of quality. Because purchasing affects the entire food service operation, it must be considered at every stage of systems planning.

Purchasing food for an establishment is not a single activity involving exchange of money for food in a market, but a series of activities from knowing what to buy and for what end use, to actually getting the food for food preparation. Refer to Figure 6.1 which illustrates the different activities involved in purchasing.

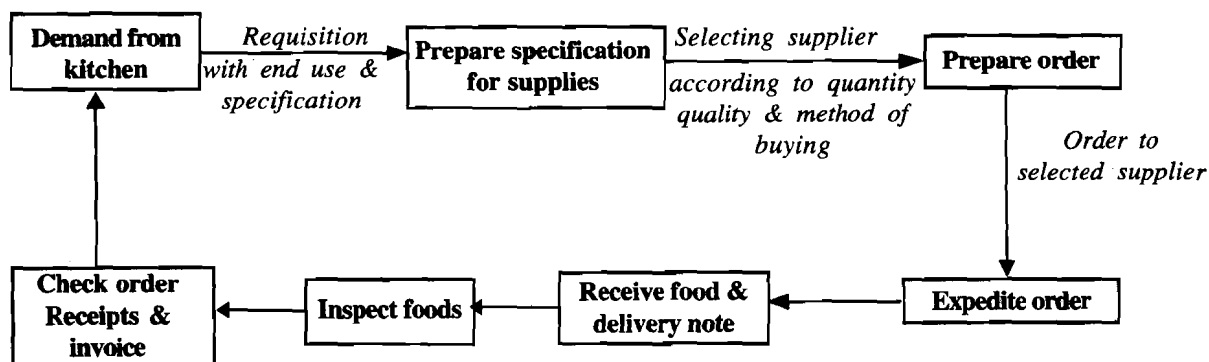


Figure 6.1: A schematic representation of purchasing activity

Having reviewed the schematic presentation of the purchasing process, you would realize that food purchasing is the function of ordering the food products. It involves first determining the product to be ordered, preparing a requisition giving exact specifications of the product required, selection of the supplier based on price, service and quality, preparing and allocation of the purchase order to the selected supplier followed by receiving the order and inspection of received goods and receipts to ensure compliance.

While studying about the purchasing process you would have also noticed that purchasing as an activity involves the market and the buyer. Let us get to know these two links in details next.

6.3 THE MARKET AND THE BUYER

Purchasing as an activity to a great extent involves the market and the buyer. The market acts as medium through which goods are relocated and transported from the producer (area of production) to the customer (the buyer). Once the food commodities are on the market, it is there for the consumer for purchasing. As a consumer, an individual can encounter various types of markets from where purchasing food items can be done. A *primary market*, as the name suggests, is a basic market where essential goods such as fruit and vegetables are sold near the growing areas itself. For example, markets of Nagpur act as a primary market for oranges.

From the primary markets goods are delivered to the *secondary markets* after they are processed and are prepared for the distribution to the secondary markets. *Wholesalers* or *purveyors* (middlemen) purchase in large quantities from the basic primary markets and then distribute in smaller amounts to local buyers. Sometimes, food items are also distributed through brokers. These act as a connecting link between the buyer and the seller, without at any given time, assuming the ownership of the food item. Apart from brokers, food items are also redistributed through commission agents, who buy the commodities and with a guaranteed source of supply, sell the products at price decided by them. Another type of market a buyer can encounter is a *local market*. Such markets are useful for small food service establishments who have money and storage area to purchase only what is currently required for utilization. The market is an extremely effervescent yet at the same time ever-changing. Buyers should thus be aware of current trends in commodities, their pricing and try to evade as many middlemen as possible in the process of purchasing. In order to do so a buyer has a number of intelligent roles to play.

In the next sub-section we shall learn about the role of the buyer and identify who a buyer is.

6.3.1 The Buyer

A buyer is an individual who spends money on behalf of the establishment, to purchase merchandise for the food service unit. He thus has heavy responsibility for the well being of the food service unit. Therefore, she/he needs to possess skills and knowledge in order to be abreast with latest buying trends that would fetch maximum profit to the organization. A buyer is responsible for all negotiations that are to be done with market representatives and should also possess adequate legal knowledge in terms of operating order and contracts. The buyer should be aware of the latest commodities that are on the market and how they are handled. What food products are available in which particular market and in what season? He should have sound knowledge regarding the prevailing prices and fluctuations occurring from time to time in wholesale and retail markets. Thus geared with all this knowledge, a buyer is provided a certain degree of independence and authority by the food service organization according to organizational policies within which the buyer is allowed to operate.

For buying well, the person responsible for placing the order for food on behalf of the customer must have some basic knowledge. This knowledge will include:-

How Various Commodities are Marketed and Handled?

Food and food products available in market undergo a constant change. Newer varieties of fresh fruits and vegetables are constantly researched to improve size,

colour, texture and flavour for example the appearance of newer varieties of citrus fruits and mangoes, different sizes of chilies, cabbage, tomatoes, potatoes etc.

What Food and Food Products are Available in the Market in a Particular Season?

Fresh foods, which have to be transported long distance, reach the consumer after a lapse of few days. It is therefore a good policy to use fresh produce especially meat, fish, poultry and vegetable as soon as they are received in food service establishment. Appearance should not be the only characteristic on which to base one's decisions regarding food purchasing. Quality characteristic of different foods must be kept in mind.

Prevailing Prices and Fluctuations Occurring from Time to Time in Wholesale and Retail Markets

Prices of food fluctuate from season to season, and also in response to external factors like famines, drought, factory closures, customer demand etc. Knowledge of these equips a food buyer to buy the cheapest and the best products, if he is vigilant of market conditions.

Size and Types of Packs Available

Foods of the same quality come in many sizes and type of packs. For example rice may be purchased in gunny bags of 25 kg or polybags of 10 kg or 5 kg, depending on the requirement of individual food service organization.

Quantities to be Bought for each Commodity at a Time

The buying quantities will depend on number of factors, which are listed herewith:

- i) Degree of perishability of food and its keeping qualities.
- ii) Rate of its use.
- iii) Frequency of deliveries possible.
- iv) Amount of storage space available.

A buyer also needs to possess certain qualities to work effectively such as:

- High moral and ethical values, so that he is not influenced by or obligated to suppliers in any way.
- Objectivity in his judgment of quality offered in term of price and service.
- Loyalty to customer in terms of being able to recognize good quality that is free of adulteration and contamination.
- Possess skill in identifying markets and establishing good relations with suppliers around.
- Accepting food brands that are marked by standardizing agencies like FPO, ISI, Agmark etc. in India.
- Lastly, buying demands maturity, integrity and bargaining skills in order to profit the food service establishment.

From the above discussion it is clear, that a buyer with high moral values and a sound knowledge can go a long way in being an asset to the food service unit. However, the buyer also has certain functions attributed by the food service unit, these include.

- Record keeping for each type of menu developed
- Ability to store food in a manner that enhances its quality
- Rotating use of packaged foods, and
- Formulating specification for food items.

Therefore a buyer must be successful in making deal without any friction from the market representatives, and at the same time get a good deal for the organization. So far we have focused on the role of the buyer. The vendor or the food supplier too is an important link in the purchase process. Now, let us look at the role of the vendor next.

6.3.2 The Vendor or the Supplier

The basic consideration for any food service establishment is the selection of suppliers who are reliable and have high quality in terms of food items being purchased. The information about selection of vendors should include details about delivery date and schedule, reliability, their ability to furnish the desired quantities of supplies and mode of credit payment. It is also important to note the location and the size of a food service unit before selecting a desirable vendor. Food service units located near a big city may have several vendors to suit their needs. However, food organizations that are small and located outside the city may purchase food items such as fresh vegetables and fruits locally. For better shelf life, food service establishments may prefer the use of canned items, for which the buyers may choose a wholesaler. Thus, it is important to note that the vendors have the following qualities before a buyer chooses to associate with him.

- Reliability for quality and quantity.
- Convenience vending at doorstep, and
- Adequate credit facility and reliable mode of money transaction.

After understanding the role of the vendor in purchasing, let us now get acquainted with mode of purchasing that can be adopted by different food service establishments.

6.4 MODE OF PURCHASING

Food service establishments often have their mode of purchasing according to their convenience. In order to obtain products reliably and with ease, different establishments opt for mode of purchase that can be *centralized* or *group buying*. Let us see what these terms are.

6.4.1 Centralized Purchasing

Centralized purchasing or buying is one where the purchasing department of the organization owns the responsibility and authority of bringing in the food products, equipments for all units in the organization. This type of purchasing holds good in terms of large food service establishments such as restaurants, university canteens, hospitals etc. where individual units are relieved from interacting and negotiating from market and sales representatives, thus saving valuable time. It is a good way for purchasing, where a food service organization has a one big central storage area from where supplies are redistributed. However, in case of daily purchases of fresh perishable items the authority is delegated to multi units of the food establishment.

The disadvantage of such a mode of purchase includes excessive paperwork, delays in requisition being passed which in turn have an effect on the incoming supplies being late. Also, friction or arguments may develop between food service unit and the purchasing department if clear-cut specifications are not mentioned for quality of supplies. Therefore, this kind of purchasing is generally suitable for large food service units involved in buying food commodities in large amounts.

6.4.2 Group Purchasing

Group purchasing is different from centralized purchasing where in the members responsible for buying are independent of each other and do not fall under the same

management. Here, two or more small service set-ups may combine together for buying merchandise at lower rates. This is done with an effort to increase the amount of purchases; lower prices on merchandise and at the same time consolidate buying.

We can understand this concept with the help of an example. Raja is running his own school canteen. Raja in order to purchase food items can associate with different canteens, in his vicinity, to purchase large volumes of goods (in bulk) at prices that can be negotiated on by bargaining.

As we can see the advantage of group purchasing is definitely the price advantage of merchandise. However, association of different organizations together may initially require some time. Another point that needs to be remembered is that here the buyer is employed by the group or member organizations and the cost of employing is borne by the member organization itself. With this information on hand, let us now study the various methods of purchasing prevalent in the market today. But first let us recapitulate what we have learnt so far. Answer the questions given in check your progress exercise 1 and tally your answers with the answers given at the end of the unit under the heading answers to check your progress exercises.

<p>Check Your Progress Exercise 1</p> <p>1) What are the various types of markets that a buyer can encounter while purchasing?</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>2) Discuss the qualities a buyer should possess for efficient purchasing for food service unit.</p> <p>.....</p> <p>.....</p> <p>.....</p> <p>3) Differentiate between centralized and group purchasing.</p> <p>.....</p> <p>.....</p> <p>.....</p>

6.5 METHODS OF PURCHASING

Every establishment sets its own purchasing policies according to its specific needs for different types of food. Whatever may be the policies laid down; the method of buying depends largely on the quantities of the various items to be purchased at a time. The different methods possible are discussed herewith and highlighted in Figure 6.2.

6.5.1 Informal or Open Market Buying

Most food service establishments use the informal methods for buying food items. The buyer invites quotations from suppliers for items according to required specifications. The suppliers are then selected on the basis of the sample, prices,

delivery schedule and other services offered. *Open market buying* is an informal method and can easily be adapted to individual establishments. It is generally used for purchasing of perishable foods like fruits, vegetables, meat etc.

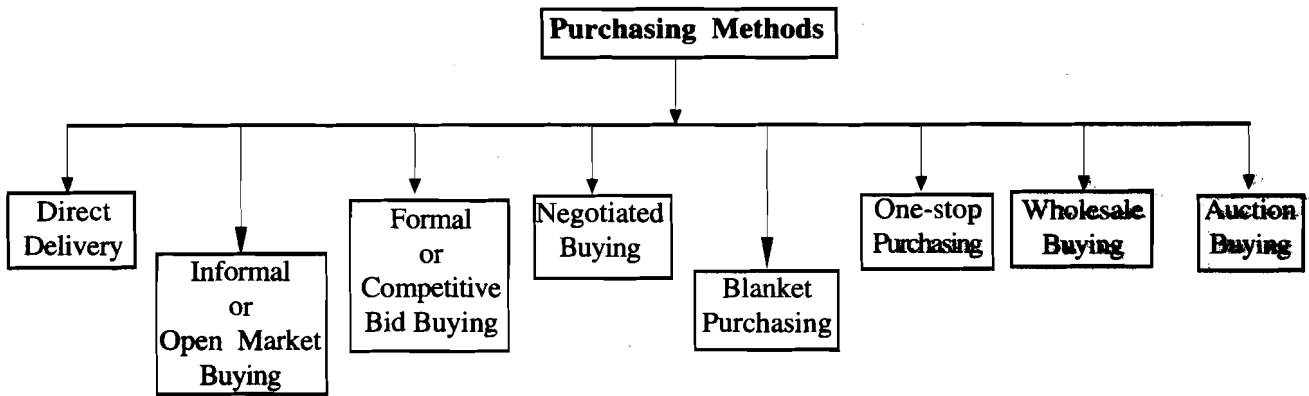


Figure 6.2: Purchasing methods

This method of buying helps to appreciate and be aware of the change in market situations and make the best use of prices and commodities by using instant discretion in purchases. For example, on a visit to the market with an idea of buying brinjal among other vegetables, if the buyer finds that the brinjals are mostly of poor quality, he can instantly decide to replace the items with the vegetables of good quality.

Open market buying, therefore, is the most commonly used method of purchasing. This type of buying involves purchasing food commodities on daily, weekly or monthly basis. Order is generally placed after consideration of price in relation to quality and delivery offered. Most food service establishments use these methods for buying food items. Here the buyer invites quotations from suppliers for items according to specifications. The suppliers are then selected on the basis of sample, prices, delivery schedule etc. as illustrated in Figure 6.1 earlier. This type of purchasing can be done by visit to markets or via telephone after monthly quotation list for grocery items have been given. In this type of buying a buyer can choose from a list of vendors for various items that are required. In this way, comparison of prices between various vendors can be made.

The advantage of such a method is:

- It requires less lead time compared to formal method of buying
- Is appropriate for small service units such as school canteen etc.
- This method is useful when immediate delivery is required.

However, the method has its own disadvantages. Occasionally, the prices of the vendors should be compared with other vendors in the market to avoid 'price creeping'. Also introduction of a new supplier every now and then can check the practice of price creeping.

Having seen what informal method of buying is let us next learn about the formal method of buying.

6.5.2 Formal or Competitive Bid Buying

In the competitive bid buying, the formal quotations are invited from the sellers against the written specification of each category of foods. Refer to Figure 6.3 which illustrates a fruit and vegetable quotation and order. This request for bids material is widely distributed or posted to the interest of the sellers. Along with the specification the buyers also include their request, conditions like last date of quotation, general time between orders and delivery, willingness to accept whole or part of the bid, discount, and so on framed within the purchasing policy of each establishment.

The quotations received remains sealed till the date of opening (also indicated by the buyer's request). The purchasing officer then opens them in presence of the bidders and representatives from the users department, accounts and administrative staff, who witness the quotation accepted. The practice is to accept the quotations of the lowest bidder, unless products clearly fail to meet the specifications. Government establishments generally adopt formal methods of buying for which central purchasing is done such as, hospitals or government schools, colleges, universities.

Fruit and Vegetable Quotation and Order									
Name of Food Service: Fruit and Vegetable Order Form						Delivery date:			
For use on:									
Item	Specifications	Amt. Needed	Current Amount	Amount to Order	Price Quotes Vendors				
					1 Date	2 Date	3 Date	4 Date	5 Date

Figure 6.3: Fruit and vegetable quotation and order

After knowing the procedure for formal method of buying, let us understand some terms commonly associated with the formal buying. These are defined herewith.

A) *Writing a Specification of a Product*

Refer to Figure 6.3. Do you notice the specifications column? A *specification is a detailed description of a product, stated in terms clearly understandable to both the buyer and the seller.* It should be brief and concise and carry sufficient information about the food item being ordered for purchase to avoid misunderstanding and confusion. Thus, a specification should include the following details of a product:

- Name of product
- Brand (if applicable) e.g. Brand of Ketchup
- Unit on which price is quoted
- Name and size of container (whether order is done for a basket purchase or in cartons).
- Count per container
- Specific weight (e.g. for fruits and vegetables)
- Degree of maturity i.e. ripe or unripe fruits/vegetables
- In case of canned products: Drained weight or specific gravity should be specified
- Temperature at delivery
- For meat and poultry: various cuts of meat be specified, fat percentage and aging in meat.

Thus, the above-mentioned points should be included as specification before placing an order.

Next, let us get to know the meaning of bid request.

B) *Bid Request*

A bid request form originates in the office of a personnel authorized to purchase the food items. It should include the following:

- Required quantities
- Purchase specification of each item i.e. quality
- Date on which bid request is submitted
- Date of delivery
- Mode of delivery
- Terms of payment
- Willingness to accept all or parts of bid
- Discounts offered
- Periods for which supplies are require
- Terms of negotiations
- Samples to be tested.

A bid should always be kept sealed and confidential till the due date of its opening. Bids should always be opened in front of an office of authority. Bids should always be stamped to indicate date and time of receipt and all bid requests received after due dates should be duly returned unopened. Although major food service establishments use this method for purchasing merchandise, nevertheless it has its own advantages and disadvantages. This is particularly advantageous for procurement of goods at a large scale or in a multiple unit organization, where a formal bid clearly minimizes all confusions regarding quantity, quality, price and delivery. It is also suitable for purchasing of frozen products and non-perishable food items. However, this method is not suited for buying perishable items like fruits and vegetables due to daily fluctuations in prices in the market.

The main disadvantages of this type of buying are that it requires careful planning in advance for filling in bid requests, which is time consuming. Secondly, manipulation in terms of monetary resources occurs due to political pressures in major food establishments.

Now that we have reviewed the formal method of buying and the terms associated with it, we move on to the study of the types of competitive bid buying.

Types of Competitive Bid Buying

Depending on the type of food service unit and its financial resources, need to buy and storage a number of variations in formal method of purchasing has come up. Let us now see what these variations are:

A) Firm Fixed Price (FFP)

In this type of contract, the prices are not subject to change or adjusted during the period of contract. Here, the vendor is at maximum risk and this is used when there is a definite specification and fair prices are quoted from the very beginning.

B) Negotiated Buying

As the name suggests this involves negotiations between buyer and the sellers regarding the price and quantities. This method is used generally for seasonal items, which are limited in supply, where both buyer and the seller are keen that the product is lifted quickly from the market. Negotiated buying, therefore, involves taking quick decisions in fluctuating market. The buyer contacts the seller directly, negotiates the price and the quantity and request bids are submitted as soon as possible. This method is thus quick and more flexible and less formal.

Negotiated buying may be adopted when purchasing food items directly from farmers or manufacturers, but this is generally possible only for very large establishments

because the contracts with manufacturers would be feasible for large quantities. The advantage is of course in terms of quality, as well as, price, but storage cost increases.

In this two types of contracts may be signed between the buyer and the seller. This include:

1) *A Firm at Opening Price Contract (FAOP)*

In this type of contract, the buyer agrees to take the supplies at a price established in the future when yield is known, rather than at pre-season prices when the contract is made. Such an agreement is therefore firm but not signed till the seasonal yield is known.

2) *A Subject to Approval of Prices (SAP) Contract*

In this case the buyer has the option of rejecting the orders if the fixed price in the future is not acceptable to him.

With this we end our study of competitive bid buying method or the formal method of food purchase. There are other methods of purchase which can be adopted by food service organizations. These are described next.

6.5.3 Other Types of Purchasing Methods

Apart from the ones described above, there are also other methods of purchases that are used by food service establishments for purchasing merchandise. These include the wholesale buying, blanket purchasing, one-stop purchasing and the cost-plan purchasing. Let us get to know about these methods.

A) *Blanket Purchasing*

This type of purchasing is used when wide variety of items are bought from local suppliers but the exact items, the amount and delivery specifications are unknown in advance or prior to purchase. Here, vendors agree to supply on 'charge- account basis'. All food items are ordered during specified period, and such a kind of purchasing should be established with more than one vendor in order to avail best price and for checking price creeping.

B) *Cost-Plan Purchasing*

This type of purchasing is also called as specialty buying, where the buyer purchases only one kind of item such as meat and poultry etc. Here, a buyer decides to purchase certain merchandise from a wholesaler for a specific time period based on a fixed markup over the dealer's cost. The dealer's cost here includes the cost of material, cost incurred in packaging, shrinkage and fabrication of a product. The markup also includes the overhead expenses, cost of deliveries and other such expenses borne by the vendor. While negotiating such a deal a clear specification of what to include in the cost and dealer's markup should be done.

C) *Prime Vendor/One-stop Purchasing*

This type of purchasing which is gaining popularity amongst food service establishments, involves purchasing of all kinds of merchandise from only one vendor (prime vendor) at an agreed upon price. This type of agreement is only for a specific stated time period and involves only certain number of specified quantity of food items.

One-step purchasing not only saves time for the buyer but also saves overhead and delivery cost as compared to dealing with several vendors. The disadvantage of such type of purchasing is that in case of a loss of back up vendor, one may have to solely depend on one particular vendor without any price competition.

D) *Wholesale Buying*

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

Whatever method is used for purchasing food, it is advisable to make the procedure simple with minimum paper work. Some factors, which need to be considered while purchasing food are enlisted herewith:

- *Price*: This enables cost comparison with different brands with similar products to be made instantly, and buying decision arrived at without undue delay.
- *Labeling*: Labels which indicates quality symbols like ISI, FPO, AGMARK, date of manufacture, expiry date, maximum retail price/kg or pack, nutritional information, all enables the food buyer to select food properly as per his/her own requirements.

Thus, we have now read about the various methods of food purchasing a food service establishment can choose from based on its needs and requirement. Now let us see how an organization identifies its needs for placing an order of purchase.

6.6 IDENTIFYING NEEDS AND AMOUNTS TO BUY

A major factor in ordering food is maintaining the right level of inventory or stock. A food service establishment should identify the quantities needed for preparing a planned menu and supply ingredients to churn out the correct recipes. All food items, later used as ingredients, are required to be stocked prior to the production of dishes in a food service unit. Hence a food service unit must have a certain stock in order to keep the unit running. There are a number of factors which need to be considered to arrive at the proper size order and timing to control inventory levels. The factors need to be considered include:

- What is the daily usage rate?
- What is the lead time once an item has been ordered for delivery of the product?
- What is the minimum safety level for the inventory item in question?
- What level of inventory balance should be considered the reorder point for ordering?
- What is the maximum stock/inventory level that should be allowed?

A brief review of the stock level is presented herewith.

6.6.1 Minimum Stock Level

Minimum stock level can be defined as the point established for each level below which the inventory should not fall. An inventory being a system of communication between area of production and store room, where needs are expressed for production of items. Establishing minimum levels of stock provides a medium through which buyer can be alerted for quick replenishment of used goods.

Minimum stock levels can then also be referred to as a safety factor for replenishment of finished food items as mentioned above.

6.6.2 Maximum Stock Level

Maximum stock level can be defined as the stock equal to minimum stock level plus the estimated usage determined through prior utilization of goods. Maximum stock

level is the means of alerting the buyer from overspending and also from the fact that a particular item requires no requisition till the time it has been used or asked for.

Based on these levels order forms for purchasing of items are formulated, as we have seen before. Next, let us get to know how to decide on the quantity of food to be bought.

6.6.3 Quantity of Foods to be Bought

The quantity of foods bought at one given time, the frequency of use of one food item and the monetary resources on hand all determine the amounts to be purchased. Apart from these storage space, portion size and dishes on the menu, number of servings needed, and cooking losses also mount to the amount of purchases to be done. For instances milk and bread are items that are consumed on a daily basis and hence its delivery is seen several times a week and the orders for these items are also such that the inventory is maintained at a desired level.

Now, once the foods items are purchased its inspection and proper receiving is necessary. So, next, let us see the correct procedure for receiving of items purchase on order. But first let us recapitulate what we have learnt so far by answering the check your progress exercise questions given herewith.

Check Your Progress Exercise 2

- 1) Explain the reason for 'price creeping' in open market buying?

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- 2) Briefly discuss the disadvantages of competitive bid buying.

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- 3) Briefly explain

- a) Firm Fixed Price

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- b) Firm at opening price contract (FOAP)

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- c) Minimum stock level and its significance

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6.7 RECEIVING AND INSPECTING DELIVERIES

As mentioned earlier in this unit, an important part of the purchasing process is the receiving, storage and issuing of food and supplies. Once the food material has been ordered for the supply their handling at time of delivery represents the process of *receiving*. Once the merchandise has been ordered, all items needs to be thoroughly inspected for specifications mentioned at the time of order and checked against the invoice or delivery slip. Perishable food items are checked for any spoilage. Items required to be counted, measured and weighed should be properly done. Food items such as canned products should be checked for damage and exposure to high temperatures if any. Also, all inspection related to quality and invoice prepared by the vendor should be in accordance with the purchase order. Sometimes absence of adequate inspection can be a major pitfall in receiving of foods. A number of precaution are necessary at this stage to ensure that the food is not damaged or discarded because of careless handling, spillage, cross contamination and incorrect weights or volume.

Let us review the major steps involved in receiving of purchases. The process involves the following:

- 1) the delivery note is checked with copy for order placed.
- 2) count, weights or volume are checked to tally with the amounts of various items on the delivery note.
- 3) the quality of all ingredients is checked with the specifications given to the supplier. Any unacceptable items should be returned with the person bringing the delivery.
- 4) any discrepancies noticed should be indicated on the copy of the delivery note signed to be notified to the supplier. When the delivery note is signed the material that is delivered has been accepted. In this case any damaged item is noticed after the delivery the suppliers are informed.

Often receiving is done in an area located near the delivery door of the food service unit. It is usually an area exclusively reserved for receiving of deliveries and is generally located at the rear side of the establishment. The receiving area should at least consist of a platform for loading food items, weighing balance/counter scales, table for inspections of goods and carts for moving goods to storage area.

Care should be taken to maintain the receiving area in a clean way, devoid of any pest, open drains etc. The area should also have space for water supply for scrubbing purposes. Cares should be taken that the vendor does the delivery of goods with proper invoice. Therefore, the major check list of things to be remembered during the delivery procedures include:

- 1) The suppliers get an order in writing stating the date on which supplies are required.
- 2) He passes it to this store department or purchasing officers. The order is than kept ready to delivery on the specified date.
- 3) It is transported to the buyer's store for receiving.
- 4) The goods are delivered along with two copies of the delivery *chalan*, one signed by the buyer and returned to the suppliers in conformation of having received the goods; and second is returned by the buyer for counter checking the bill.
- 5) Receiving material is generally done close to the storage or just outside them so that it is easier to store them after receipt. In larger establishments the receiving area may be well designed space provided with weighing, washing and packing facilities for storing food in cold or other storage.

Once the purchases have been delivered and received the next logical step involved is its proper storage as soon as possible, with correct store room management. Next, we shall get to know how food items are stored in a food service establishment.

6.8 STORAGE SPACE

The proper storage of food after it has been received and checked is an important factor in the prevention and control of loss of waste.

Depending upon the speed with which the food spoils, they are classified as perishable, semi-perishable and non-perishable, each type requiring different types of storage conditions. There are basically two types of storage, *dry storage* and *low temperature storage*. These are further subdivided according to the temperature required as shown in Figure 6.4.

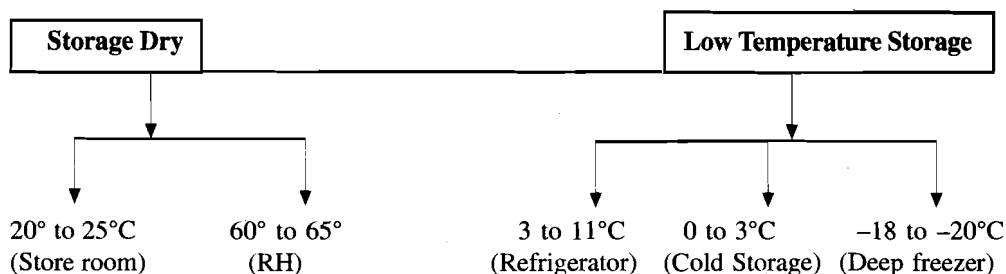


Figure 6.4: Storage temperature for food items

Let us get to know more about these storage conditions.

6.8.1 Dry Storage

As the name suggests, dry storage is a place for the storage of dry ingredients (usually stored at room temperature of 20 - 25°C). The storage should be dry, cool, well ventilated and free from infestation of any kind in order to maintain the food in good condition.

The space for dry storage must be large enough to hold stocks for commodity for one to three months according to its frequency of use. The average temperature of a dry storage varies depending on the range and nature of commodities stocked, and weather conditions. If the outside temperature is too high as is the case of tropical countries, then the temperature of the storage may have to be brought down by air cooling the store, or the length of storage time of commodities are reduced. For example, firm green tomatoes, under ripe bananas, lemons and other citrus fruits require temperature of 18°C to 24°C while the potatoes and onions can be stored at higher temperatures for few days, the latter must however be put into storage at 10°C for 3 weeks before use, to allow sugars to be converted into starch. Foods, which need to be held only for 2 - 3 days, require a temperature of 10 - 15.5°C, like breads and bakery products. Where space allows fats and oil should be stored away from the rest of the food.

Dry store rooms should be well lighted so that every item placed in them is easily visible and identifiable. Good ventilation helps to prevent spoilage and maintain the temperature required.

Next, we shall learn about the cold temperature storage.

6.8.2 Low Temperature Storage

The principle underlying the designing of low temperature storage is to maintain temperature at levels, which will inhibit the growth of microorganism, there by preserving the food. At high temperature, microbial activity gets accelerated because perishable food have relatively high portion of moisture providing suitable humidity for

spoilage to occur. There are three distinct types of low temperature storage based on different temperature range, as you may have noticed in Figure 6.3, maintained for the storage of semi perishable and perishable food. These include:

- a) Refrigerated storage
- b) Cold storage
- c) Freezer storage

Let us get to know more about these low temperature storage.

A) Refrigerated Storage

Refrigerated storage is a storage space planned and maintained at a temperature 3°C to 10°C. Such storage is necessary for maintaining the quality of perishable food for 2 - 3 days only after which certain changes start taking place in food due to enzymatic or microbial activity.

It is a good practice to keep food covered in refrigerator to prevent them from drying. This also prevents odour from one food being picked up by others.

B) Cold Storage

Cold storage is generally one which the temperature is maintained between 0° and 3°C, thereby reducing the enzyme activity to a minimum. Such storage are also called “chill room” and can hold perishables for over a week, and in the case of fruits and vegetables, even up to a month depending on the stage of ripeness and variety.

C) Freezer Storage

In the freezer, storage temperature ranges from -18°C to -20°C. For successful freezing, it is necessary to blanch foods, cool quickly to freezing temperature and pack in air tight containers or bags in quantities which can be utilized immediately on thawing. A food removed from the freezer storage for use must never be partly or wholly kept back or refrozen, as there is a serious risk of microbial contamination.

Now that we have learnt about the storage temperature appropriate for different foods. Next we shall focus on another important aspect i.e. store room management.

6.9 STORE ROOM MANAGEMENT

Maintaining stores efficiently require a good communication system between the storekeeper and the user department, to know their needs specifically. In order to allow smooth functioning of a store room, the organization of storage should be efficiently done. Let us get to know how.

Organization of Store

The arrangement of food items in storage spaces affects the efficiency with which foods can be stocked, issued and reordered. Hence the organization of store may need to consider the following:

- Arrange the food according to type of commodities.
- Place stock items in alphabetical order of food categories.
- Stamp the date of delivery on every stock received before shelving to ensure that old stocks are used first.
- Place the item on the shelf according to the stamped date, with earlier one in front row and late one at the back. The placement of commodities should follow *first-in-first-out policy* (FIFO). That is the older commodity should be placed in front of the shelf so that they are used earlier.

- Mark prices on the stock as well. The information can be made readily available to the users department and help the catering manager.
- Arrange products to give an organized appearance. Efforts should be made to ensure that commodities do not lie around the floor at any time. The items that come in paper packet or sachets once opened should be transferred to airtight containers to ensure the retention of its quality. Proper label of each container should be ensured.
- The store room should be well ventilated to allow air circulation and reduce humidity.
- Infestation of cereal and pulses by weevils, presence of white ants in the store, or rodents and other pests can damage the flavour, and quality of food making them unfit for the consumption. The store should be kept clean and free from rodents, insects and pests.
- The store room should be preferably kept locked and opened only for issue, to safeguard the commodities from pilferage.

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

Maintaining stores efficiently require a good communication system between the storekeeper and the user department, to know their needs specifically. Let us now see what is this communication in the form of records that operate in a store room.

Store Room Records

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

Requisition Slip

This is a request form submitted by the user's department to the store in charge for the issue of required items. It is customary to put in the requisition slip to the store at least one day in advance, so that the food items required for the next day are collected and issued in time for food preparation.

Order Forms

The person authorized to do so must sign an order. The catering manager authorizes purchase in small establishments, and a purchasing manager in establishment, which has purchasing department.

Stock Book Maintenance

In this records of all items received and issued are maintained along with stocks in hand and there monetary values.

Invoice

This is the bill, which follows a delivery, to be paid for the buyer.

Here a brief review is presented of the store room record. A detail review of the inventory records and control is presented in Unit 9 later in this course. Do read the unit carefully.

Check Your Progress Exercise 3

1) Discuss the major steps involved in receiving.

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2) What are the pitfalls in receiving and delivery of goods? Discuss.

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3) Briefly explain

a) Perpetual Inventory

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b) Invoice

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c) Receiving area

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6.10 LET US SUM UP

In this unit we learnt that purchasing is an extremely essential component of all food service establishments and is important to keep the kitchen fuel running. Purchasing can be carried out in a number of ways the two broad categories being formal and informal method of buying.

All food organization adopts method of purchasing suited to their needs and requirements and means of communication between the kitchen → store room → buyer is maintained. Once purchases are bought they are inspected and received inventory made and properly stored according to perish ability. All demands of items are met through the store room via requisition slips and simultaneous entries into the store room record. All records are kept up to date to prevent any confusions and misunderstandings.

6.11 GLOSSARY

Requisition Slip Form : is a request form submitted by the user's department to the store in charge for the issue of required items. It is customary to put in the requisition slip to the store at least one day in advance, so that the food items required for the next day are collected and issued in time for food preparation.

Invoice : is a bill, which follows a delivery to be paid for the buyer.

- Receiving area** : a place located near the rear of the food service unit where purchases are downloaded and bought in for inspection.
- Inventory** : a system of communication between area of production and store room.

6.12 ANSWERS TO CHECK YOUR PROGRESS EXERCISES

Check Your Progress Exercise 1

- 1) The various types of markets are primary, secondary and local. Primary market is one where goods grown are sold there itself. The goods after basic processing is sent to secondary market. Local market is a market located near the food service establishment.
- 2) The buyer should be personnel of high morality and ethical values. He should possess a good knowledge about latest trends in market, various types of vendors and know about mode of payments. He should possess good bargaining skills.
- 3) Centralized purchasing is one where the purchasing department owns authority for purchasing all kinds of merchandise for all food service units in an organization. Where a group purchasing involves association of two or more small service set-ups for buying merchandise at lower rates.

Check Your Progress Exercise 2

- 1) Many times in informal method of buying, buyers generally stick to one particular vendor, thus resulting in prices of one vendor not being compared with other slowly resulting in price creeping to set-in.
- 2) The major disadvantage of competitive bid buying is that it is time consuming and requires careful planning. Moreover manipulation in terms of monetary resources occurs often due to political pressures.
- 3)
 - a) Firm fixed price is a variation of formal method of purchasing where prices of commodities are not subject to change or adjusted during the period of contract; thus putting the vendor at maximum risk.
 - b) FAOP is a type of contract where the buyer agrees to take the supplies at a price quoted in the future when yield is determined rather than at a pre-season contract.
 - c) Minimum stock level is a point established for each level below which the inventory should not fall.

Check Your Progress Exercise 3

- 1) The major steps involved in receiving are firstly checking of the invoice followed by counting, weighing of items as per delivery note, quality check as per order and return of damaged goods if any.
- 2) The pitfalls in receiving and delivery are first linked to quality. Often the quality of a good delivered are not according to specifications, Volume and weight control of goods should also be checked for which at times results in misunderstanding and confusing.
- 3)
 - a) Perpetual inventory is also called as the running record of balance on hand and provides a continuum to what products are purchased are in storage and are being used at any given times.
 - b) Invoice or delivery slip is the bill which follows a delivery to be paid by the buyer it accounts for name, specifications, mode of payment and unit and actual cost of items ordered, at least.
 - c) Receiving area is the place generally located at the rear of food service establishment where goods ordered or purchased are loaded down, checked and inspected with counter scales on platforms before storing into store room.