

**FOOD COSTING  
THEORY(DFPO2)  
(DIPLOMA IN FOOD PRODUCTION)**



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**LESSON 1****FOOD AND BEVERAGE COSTING****1.0 Objective:**

The objective of this lesson is to give an insight into costing and importance of costing and cost control – costing methodology

**CONTENTS:**

- 1.1 Introduction**
- 1.2 Concepts of Costing**
- 1.3 Evaluation of Selling Price of Food**
- 1.4 The nature of the Product**
- 1.5 Food and Beverage Comparators**
- 1.6 Cost Controlling**
- 1.7 Objectives and Advantages of Cost control**
- 1.8 Summary**
- 1.9 Self Assessment Questions**
- 1.10 References**

**1.1 INTRODUCTION**

Costing is an integral branch of accounting process. It provides management with cost data relating to products, processes and operation as well as helps the appraisal of actual costs against predetermined budgets and standards. In simple terms it may be defined as classifying, recording, and appropriate allocation of suitably managed data for the purpose of control and guidance of the management. In the food and beverage industry, costing includes the ascertainment of the distribution. Food costing means such an analysis of information as to enable the management to know the cost of producing and selling i.e., the total cost of various products and service, and also to know how the total cost of production is constituted.

**1.2 CONCEPT OF COSTING**

The basic concepts of costing are

1. In view of peculiar problems, food and beverage establishments have designed its own costing system.
2. The system of costing requires reasonable accuracy.
3. Continuous costing system must be used for collecting food and beverage information
4. A proper unit of costing must be determined

Main Advantage of Food and beverage costing are:-

1. Comparison of cost per unit in one period with that of another or actual cost with the standard
2. Fixation of prices of products- meals, dishes, portion etc.
3. Helps to plan the activities of food and beverage operation
4. Decision regarding the production of a product
5. Causes of profit or losses can be revealed
6. Reliable check on the accuracy of financial accounts.

In an ordinary trading business where goods are sold practically in the same form as were purchased, the cost becomes a known factor. In food and beverage establishments, however, before a dish emerges as a final/finished salable product, many varied factors enter into its cost of production by way of raw materials, such as stores consumed, productive and non productive labour, direct expenses, management cost, selling and distribution charges, that it becomes a matter of considerable difficulty to ascertain the true cost of the products. It is therefore, essential that a sound system of food and beverage costing must be designed for securing expense control and ascertainment of accurate final cost.

It will also help in the apportionment of various factors of cost of production and bring into light the items of wastage of raw material, labour and overheads. For the ascertainment of accurate cost, departmentalization of work is essential. The production of any dish in a kitchen is always supported by a variety of auxiliary services which are all so very necessary for the fulfillment of production.

### **1.3 EVALUATION OF SELLING PRICE OF FOOD**

Another method is to identify the actual amount of sales. This requires the selling price of food supplied to customers/guests. This may be done over a sample period in order to establish a fair average. A deduction from total takings on the basis will provide a food sale figures. Evaluation of food supplied could also be done on the basis of charge made for chance food sales. Suppose, the menu offered to hotel visitors is the same as a *table d'hote* food offered at Rs. 200/- the em-pension tariff relate to food sales.

### **1.4 THE NATURE OF THE PRODUCT**

The hotel industry not only provides a service but there is usually a product associated with their provisions. Specially in the case of food and beverage service the two main components of the 'meal experience' are the food and beverage product and their provision. The nature of the product/ service- mix, in this industry has following peculiarities which strangely influence the style and nature of its service operation and management-

#### **1. PERISHABLE NATURE OF SERVICE**

A hotel bed or restaurant seat which is unsold on a particular day/time cannot be stored for the next day/ time. This problem is very acute because hotel services and food and beverage business are subject to fluctuating demand on an hourly, daily, weekly or seasonal basis.

#### **2. INTANGIBLE NATURE:**

It is very difficult to pin-point the benefits of staying and eating in a restaurant. Total experience may be associated with a number of elements like-

- a) The personality of the staff.
- b) The image of the hotel/restaurant
- c) The attraction of associating with other customers.

#### **3. HETEROGENOUS NATURE OF SERVICE**

There is a great variation in the service given to different customers. It is difficult to establish and monitor quality standards for service than for manufactured products. The heterogeneous nature of service is generally found due to the following factors:-

- a) A group of customers is in a hurry
- b) Another group of customers is out for relaxed evening
- c) The staff favours serving one type of customer over other types.

#### 4. SERVICES ARE CONTACT DEPENDENT

In this industry either the customer has to come to the service out-let or the service must go to the customers. The primary reason for this contact dependent is that the product component of the service provision is usually manufactured very close to the time of its sale.

#### 1.5 FOOD AND BEVERAGE COMPARATORS

The valuation of stock for measuring food and beverage cost are : FIFO,LIFO,average and standards. For the purpose of effective food and cost control a standard is needed for comparison purpose. There are four types of food and cost comparators which could be used

##### DIFFERENT COMPARATORS USED IN F AND B CONTROL

NO	COMPARATOR	AREAS OF FOCUS	COMMON APPLICATION	AREAS OF APPLICATION IN HOTELS
1	Cost percentage	Cost-revenue relationship	Commercial hotel/ restaurant	Control of food from main kitchen
2	Per capita cost	Cost & volume Relations	Institution Catering	Staff Meals
3	Commodity usage	Correct usage of each ingredient	Fast Food, Bottle Wine Sales/ Retailing Sales Outlets	High Cost Items like pre-proportioned
4	Potential Sales	Correct sale of each Ingredients	High Cost Items , Bar Retailing	Issue of sandwiches to night porters, Double Beers

1. **Cost percentage or Kitchen percentage or Food Cost Percentage**
2. **Per Capita cost**
3. **Commodity usage**
4. **Potential sales**

#### 1. FOOD COST PERCENTAGE

Also known as cost percentage or Kitchen percentage, this is the most simple method of comparator. In small hotels where one person can keep personal control over profits, volume, quality standards, and production techniques, this method is the most appropriate. In large hotels, with large turnover, and division of responsibility the choice of an arbitrary and constant large food cost percentage may affect the optimum balance between quality and cost. On the other hand, where sales-mix and purchase price variation may bring about an increase in food costs, undue pressure on food cost staff to attain an random cost percentage food may result in loss in quality and drop in volume. Therefore instead of adopting an arbitrary target food cost percentage, large hotels are advised to calculate a potential food cot percentage between sales-,mix, current portion cost, and selling price

Budgeted food cost is one which the business intends to incur. The potential food cost is that should be incurred based on current prices, selling price, sales-mix, standard recipes and portion sizes.

## 2. PER CAPITA COST

In institutions which operate within closely defined subsidy levels, use this method. This is an ideal situation for the use of Pre-Operational Control. Menus can be pre-costed and only sufficient food requisite to meet the requirements of the days planned production. For example, a catering officer in defence establishments will have a feeding allowance for each airman/soldier/sailor. Each day. Similarly, inventory and food cost control system for hospital caterer work on pre-operation control system.

## 3. POTENTIAL COMMODITY USAGE

This system details of standard recipes used for each item. Stock levels for each commodity are also stored and up-dated as deliveries are received. As each item is sold, the system decreases the inventory total for each ingredient by the amount specified in the standard recipe. When required, the manager can obtain a print-out of the potential stock level of each commodity. A quick check of what is actually in stock will reveal exactly where shortages have occurred. This system is most appropriate to business with limited product range and a high degree of standardization, such as in fast food operations.

## 4. POTENTIAL SALES VALUE

It is most useful for ensuring that commodities have been correctly transferred into revenues. In this system each commodity is valued at its rated value. After a stock-take, the sum of the potential sales value of all commodities used is compared with the actual sales revenue. Any shortage indicates that either money or stock has been wasted or misappropriated. This method is most used in bars.

Any or all the above methods may be used depending upon the requirements of the hotel. The food from the main kitchen may be controlled by means of a potential gross profit percentage. High cost item like pre-portioned meats may be controlled by commodity usage. The sandwiches issued to the night porter may be controlled by a potential sales value and staff meals may be controlled on a per capita basis. A cocktail bar may be controlled by commodity usage based around a sophisticated point of rate system but a double bar in the same hotel may be better controlled using potential sale value.

## 1.6. COST CONTROLLING

Particular	Percentage of sale
Cost of sales	30-45
Wages and Related Costs	18-38
Other Operating Expenses	-12
Advertising and Sale Promotion	- 3
Rent	5-16
Depreciation	2- 5
Insurance	<1
Total	100

As a general guide, cost per unit or per cover in a food operation normally falls within the range as indicated.

Small fluctuation in one category of cost such as food or wages will have considerable impact on profitability.

Cost control is the management function which is concerned with keeping costs in line with standards. It is part of the management process and is concerned with keeping performance in line with plans. The model of the management process starts with setting business objectives – profit objectives, financial objectives etc. Objectives are translated into detailed plans in the areas of finance, marketing and operations. Financial control budgeting is the primary tool of these plans. The financial control function is concerned with

1. Setting of a standard – e.g. budgeted wage cost.
2. Measuring the actual performance – e.g. the wages cost incurred
3. Identify the variance
4. Take corrective action to ensure that profit objectives are still to be achieved.

## 1.7. OBJECTS AND ADVANTAGE OF COST CONTROL

A system of costing and control is an important aid to efficient management and essential of profitability of the business is to be ensured. Some hotels have developed highly sophisticated methods of cost control, specially to the higher echelons of executives, but if a hotel is to be really successful and attain maximum profitability, every single member of the staff should be cost conscious. It is responsibility of executive, heads of department and supervisors to instruct their staff and ensure that they are aware of the aims and value of cost control. Lack of understanding and the failure of implementation of cost control system has been one of the major causes of the failure of the catering units. In order to be effective, cost control techniques should always be kept to the minute. Cost control techniques should enhance the efficiency of management and should result in action being taken to prevent fraud and inefficiency

1. Cost control techniques can be exercised over all operations from the purchase of goods to accounting for sales.
2. This system will disclose the profitability of each revenue producing department
3. An efficient implementation of these techniques will reveal possible sources of economy and result in a rational utilization of materials and labour
4. Cost control system will facilitate speedy quotation for special functions such as banquets and wedding reception
5. It will provide the necessary information for the adoption of a sales pricing policy
6. The cost control data are an important instrument in the hands of management for making policy decisions.
7. In a cost control system. Comparison within the chain as well as with the industry as a whole can be facilitated.

## 1.8. SUMMARY

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before a dish emerges as a final/finished salable product, many varied factors enter into its cost of production by way of raw materials, such as stores consumed, productive and non productive labour, direct expenses, management cost, selling and distribution charges, that it becomes a matter of considerable difficulty to ascertain the true cost of the products. It is therefore, essential that a sound system of food and beverage costing must be designed for securing expense control and ascertainment of accurate final cost.

It will also help in the apportionment of various factors of cost of production and bring into light the items of wastage of raw material, labour and overheads. For the ascertainment of accurate cost, departmentalization of work is essential. The production of any dish in a kitchen is always supported by a variety of auxiliary services which are all so very necessary for the fulfillment of production.

### **1.9 SELF ASSESSMENT QUESTIONS**

1. Explain the main reasons for requiring information on costs.
2. Write notes on a) Nature of the hotel product, b) Objects of Costing, C) Advantage of food and beverage costing.
3. Define the term food and beverage control. What are the main food and beverage comparators used in this business.
4. Explain the following
  - a) Objects and advantages of cost control
  - b) Cost Controlling

### **1.10 REFERENCE BOOKS**

1. Food and Beverage Costing - Jagmohan Negi
2. Catering Management An Integrated Approach - Mohini Sethi, Surjeet Malahan

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## LESSON 2

# COST CLASSIFICATION

### 2.0 Objective

The objective of this lesson is to know about various types of cost and their percentage analysis on sales

### CONTENTS:

- 2.1 Definition of Cost
- 2.2 Components of Cost
- 2.3 Food Cost
- 2.4 Total Cost
- 2.5 Material Cost
- 2.6 Cost Sheet or Statement of Food Cost
- 2.7 Food Cost Percentage
- 2.8 Summary
- 2.9 Self Assessment Questions

### 2.1 Cost Definition

In catering a cost may be defined as the price of goods use up. Sold or consumed, and services rendered. Items are said to be consumed even when they are wasted, stolen or discarded, as happens frequently in food service. This is because they are no longer available for the purpose for which they were purchased.

The effort of every establishment is to maximize its profits, and to do that, cost would have to be minimized. To be able to exercise any control on costs therefore, it is important to understand some of the basic concepts underlying the.

### 2.2 Components of Costs

In every food service, there are basically there are three types of costs involved in its day-to-day operations:

- i) **COST OF MATERIALS:** This includes raw food and other ingredients that make up a dish, meal or a beverage, and is commonly referred to as 'material or food cost'
- ii) **COST OF LABOUR :** This includes the salaries of staff and the value of all benefits provided to them such as meals, housing, medical facilities, uniforms, insurance, bonuses, pensions, etc. It is generally referred to as 'labour or payroll costs'
- iii) **OVERHEAD COST :** This includes all such costs which cannot be directly identified with food products such as rent, rates, depreciation, fuel, cleaning materials, administrative and selling costs.

These three categories of costs are known as the 'components of cost'. While these give some idea of the nature of cost distribution, they do not tell us what happens to each of these components when there is a drop or an increase in the sales of an establishment. Yet we know



that some of these elements get affected and do change periodically to give different levels of profit.

### 2.3 Food Cost :

May be defined as “the cost of material used in producing the food sold. In other words, it is the cost of food consumed less the cost of staff meals.

#### The main objects of food cost or material costing are :-

1. To ascertain the food cost of particular item on the menu.
2. To ascertain the total expenditure on food over a period of time.
3. To control costs, prices and profit margins and provide information for formulating an effective pricing policy.
4. To disclose faulty purchasing and inefficient storing
5. To Prevent waste and pilferages
6. To ensure consumer satisfaction.
7. To bring cost-consciousness among the employees,
8. To reduce cost and improve quality
9. To provide cost estimates to managers for developing budgets.
10. To assist managers in making control decision,
11. To evaluate pricing and establish future pricing

#### The calculation of food cost could be done as given in Figure

##### Food Cost Calculation

Cost of Food Consumed	xxx
Less Staff Meals	xx
	-----
Food Cost	xx
	-----
Or	
Opening Stock or Raw – Material	xx
	-----
Add Purchases of Raw- Material	xx
Less Cost of Staff Meals	xx
	-----
	Xx
Less Closing Stock of Raw –material	xx
	-----
Food Cost	xx
	xx

The usual method of food costing is summarized as follows :--

1. Calculate the food cost of each item on the menu,
2. Control labour and overhead without attempting to apportion them to various items produced, and
3. The selling price of each dish is usually fixed by adding to its prime cost (food cost) a certain percentage to cover wages, overheads an net profits.

The formula of food cost could be written as

$$\text{FC} = \text{COST OF FOOD CONSUMED} - \text{STAFF MEALS}$$

OR

$$\text{FC} = \text{OS} + (\text{P} - \text{PR}) - \text{CS}$$

Where, FC = Food Cost, OS = Opening Stock,  
P= Purchases, PR = Purchase Return, CS = Cost of Staff Meal

## 2.4 Total Cost :

The total cost of food items is composed of three basic elements known as elements of cost. The difference of sales price and total cost of a product is known as net profit. The operating cost may be classified as :-

- i) Food cost or Material Cost (MC)
- ii) Labour Cost (LC)
- iii) Overhead Cost (OH)

$$\text{Total Cost} = \text{MC} + \text{LC} + \text{OH}$$

## 2.5 Material Cost

Material cost refers to the basic cost in food and beverage business. The cost of material which enters into and becomes part of the product is known as direct material. For example, use of ingredients in catering and flour in bread making. Each of these materials, are classified as direct if the costs can be identified with the product. In a food and beverage business material refers to four basic costs :-

1. Food Costs
2. Beverage Costs
3. Cost of Tobacco and Cigarettes
4. Cost of Sundry Sales

## 2.6 Cost Sheet or Statement of Food Cost

Cost sheet is a statement which provides for the assembly of detailed cost in respect of a cost of unit. It is prepared to indicate detail cost of the total output or products. It gives the cost per unit. The main advantage of cost sheet are :-

1. It discloses the food cost of a dish and the cost per unit.
2. It enables the management to keep a close watch and control over the production.
3. It provides a comparative study of the various ingredients.
4. It helps in formulating a useful production policy.
5. It helps in fixing up the selling price of the items produced.

### Example

Calculate the cost of food used

1	Food Stock as at 1 <sup>st</sup> January 20..	Rs. 50,000/-
2	Food Stock as at 31 <sup>st</sup> Dec 20..	Rs. 30,000/-
3	Food Purchases during the year 20...	Rs. 90,000/-
4	Food Purchase Returns for year 20..	Rs. 10,000/-

Solution

Calculation of cost of food used

Opening Stock (1 <sup>st</sup> Jan 20..)		Rs 50,000/-
Add Purchases	Rs 90,000/-	
Less Returns	Rs. 10,000/-	Rs. 80,000/-
	-----	-----
Total Available		Rs. 1,30,000/-
Less Closing Stock		Rs. 30,000/-
		-----
Cost of Food Used		Rs 1,00,000/-

Costing sheet is a very useful record of food cost covering the entire range of dishes. These could be referred to for rechecking where there is any material change in the price of the ingredients. Let us assume that the price of an ingredient has increased, the cost of other ingredients being the same. In such a situation both the total cost per portion and the food cost per portion will increase and gross profit percentage will decrease. To obtain the same amount of gross profit percentage it will be necessary to review the costing sheet and revise the selling price. Once again the food cost will be 40% of the selling price.

Thus, a cost sheet is a statement indicating the following :-

1. Date
2. Name of the dish
3. Number of portions
4. Quantity of each ingredient
5. Name of each ingredient
6. Unit cost
7. Cost of each unit
8. Total food cost
9. Cost per portion

The method of preparation of cost sheet is given below :-

1. Calculate the cost of each item on the menu. A list of all ingredients required to prepare each dish must be drawn up
2. Obtain the prices of all ingredients from the invoices
3. Prepare the cost sheet
4. To determine the overall gross profit required, the individual selling price of all dishes be calculated.
5. A certain percentage of gross profit/ kitchen profit is added to the food cost of each dish in order to determine the selling price. Overall percentage can be added to all the dishes such as sweets, soup, dishes etc. Non- vegetarian dishes (meat

preparation) may be having a high food cost percentage i.e. the lower kitchen percentage; while sweets, teas, soups may have a lower food cost percentage i.e. higher kitchen percentage. Constant surveillance must be kept on the food cost. If the food cost percentage shows unusual variance, this could be investigated and immediate corrective action should be taken.

Factors responsible for unusual variances are :-

1. External Factors:-

- a) Increase in the purchase price of the commodities
- b) Changes in sales-mix e.g. increase in salad, fall in sale of hot meals due to changing seasons.

2. Internal Factors :-

- a) Excessive wastage in the kitchen
- b) Pilferage
- c) Carelessness in portion control
- d) Bad Purchasing
- e) Suppliers not keeping to specification
- f) Overcharging of invoices in books
- g) Clerical errors in invoices.

### Cost Sheet Proforma of ABC Hotels Ltd

Name of the Dish : _____		Date : _____	
Costing for 4 portions _____			
Quantity	Ingredients	Unit Cost Price	Total Cost Rs.
		Total Food Cost	Rs
		Cost per Portion	Rs

Each dish should be costed out accurately in order to fix the selling price and find the profit.

#### Example

The following information is related to a hotel for the week ending 15<sup>th</sup> March 20 and 22<sup>nd</sup> March 20

ABC HOTEL LTD

	WEEK END	
	15 <sup>TH</sup> March (Rs)	22 <sup>nd</sup> March (Rs)
MEATS	1,05,000	1,23,000
POULTRY	60,000	69,000
FISH	33,000	39,000
FRUITS AND VEGETABLES	84,000	1,20,000
GROCERY	1,35,000	1,20,000
PROVISIONS	1,4,4,000	1,71,000
BREAD, FLOUR ETC	54,000	63,000
MILK AND CREAM	75,000	87,000
EGGS	42,000	48,000
SUNDRIES	18,000	21,000

You are required to prepare a kitchen analysis sheet indicating the percentage of each item and comment on your result.

Solution

**ABC HOTELS LTD**  
**Kitchen Analysis Sheet**

ITEM	WEEK ENDING			
	MARCH 15, 20..		MARCH 22 20..	
	Rs	%	Rs	%
MEATS	1,05,000	14.0	1,23,000	13.7
POULTRY	60,000	8.0	69,000	7.7
FISH	33,000	4.4	39,000	4.3
FRUITS AND VEGETABLES	84,000	11.2	1,20,000	13.3
GROCERY	1,35,000	18.0	1,20,000	17.3
PROVISIONS	1,4,4,000	19.2	1,71,000	19.0
BREAD, FLOUR ETC	54,000	7.2	63,000	7.0
MILK AND CREAM	75,000	10.00	87,000	9.7
EGGS	42,000	5.6	48,000	5.3
SUNDRIES	18,000	2.4	21,000	2.3
	7,50,000	100.00	9,00,000	100.00

An analysis of the figures of the two weeks indicates that every percentage for the week ending March 22 is slightly less than the previous week, except in the case of fruit and vegetable which is higher by 2.2%. This needs to be investigated and appropriate action could be taken

## 2.7 FOOD COST PERCENTAGE

Determine within the pre-determined price structure how much must remain after deducting food costs, to run profitably. Select a percentage figure and fix the menu price based on:-

- 1) The cost of the food, determined by calculating actual costs based on portion sizes. This cost should include some allowance for waste, human error, shrinkage etc.
- 2) An allowance for short-term, minor rises or drops in market prices

- 3) An adjustment for higher and low –cost items

Most of the restaurants calculate their menu prices by marking up costs. 2, 2 1/2, 3, or 4 items. If you require 40% food cost percentage, you should divide 40% into 100%, getting 2 1/2. This figure could be used to multiply the actual food cost, to determine the menu price. That is

$$\text{FOOD COST} \times \text{COST FACTOR} = \text{MENU PRICE}$$

Alternatively divide for food cost percentage desired into the food cost to determine selling price, as given below

$$\text{FOOD COST} / \text{FOOD COST \% DESIRED} = \text{SELLING PRICE}$$

## 2.8 PERCENTAGE ANALYSIS ON SALES

The Cost can be expressed as percentage of sales like for

1. Food cost Percentage ( Material Cost Percentage)
2. Labour Cost Percentage
3. Overhead Cost Percentage

Food or Material Cost Percentage : This ratio is determined by using the following formula

$$\text{FOOD COST \%} = \frac{\text{TOTAL FOOD SALE}}{\text{TOTAL SALES/REVENUE}} \times 100$$

Labour Cost Percentage + This ratio is determined by using the following formula

$$\text{LABOUR COST \%} = \frac{\text{TOTAL LABOUR COST}}{\text{TOTAL SALES/ REVENUE}} \times 100$$

Overhead cost Percentage This ratio is determined by using the following formula

$$\text{OVERHEAD COST \%} = \frac{\text{TOTAL OVERHEAD COST}}{\text{TOTAL SALES/ REVENUE}} \times 100$$

## 2.9 SUMMARY

In catering a cost may be defined as the price of goods use up. Sold or consumed, and services rendered. Items are said to be consumed even when they are wasted, stolen or discarded, as happens frequently in food service. This is because they are no longer available for the purpose for which they were purchased.

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## 2.10 Self Assessment Questions

1. What is the objective of Food costing?
2. Explain the term "Food Costing"? Describe the advantages of Food Costing?
3. What are the objects and advantages of food costing?
4. Calculate the cost of food consumed from the following:

---

a) Purchases for the month of May 20..	Rs. 23,184
Stock on 1 <sup>st</sup> May 20..	Rs, 14,490
Purchase Return during the month	Rs. 5,796
Stock on 31 <sup>st</sup> May 20..	Rs, 17,388
b) Stock on 1 <sup>st</sup> Nov 20..	Rs. 15,984
Stock on 31 <sup>st</sup> Nov 20..	Rs. 19,360
Purchases for the month of Nov	Rs. 21,560
Purchases Returns during the month	Rs 5,280

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## 2.11 REFERENCE BOOKS

1. Food and Beverage Costing - Jagmohan Negi
2. Catering Management An Integrated Approach - Mohini Sethi, Surjeet Malahan

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**LESSON 3****PURCHASING****1.0 Objective:**

The objective of this lesson is to know about purchasing, and its impact on costing and its impact on business.

**CONTENTS:**

- 3.1 Introduction**
- 3.2 Purchasing Procedures and Cost Control**
- 3.3 Purchasing objectives**
- 3.4 Purchase cycle**
- 3.5 Preparing Standard Purchase Specification**
- 3.6 Source of Supply**
- 3.7 Selection of Supplier**
- 3.8 Purchase order**
- 3.9 Methods of Purchasing**
- 3.10 Summary**
- 3.11 Self Assessment Questions**
- 3.12 Reference Books**

**3.1 INTRODUCTION**

Purchasing and receiving are two key areas in the control process of the restaurant and foodservice industry. When a customer orders an item from the menu, the customer expects to receive what the menu has listed. If size, shape, color, grade, or portions are mentioned, then those food characteristics are what the customer expects and what the customer should receive. The person responsible for purchasing the items for the restaurant or foodservice operation must recognize this customer expectation and procure exactly what is stated on the menu

This chapter introduces you to the purchasing process and various factors that need to be considered to ensure that your customers' food and menu expectations are met or exceeded. It will also present a variety of methods you can use in purchasing

**3.2 Purchasing Procedures and Cost Control**

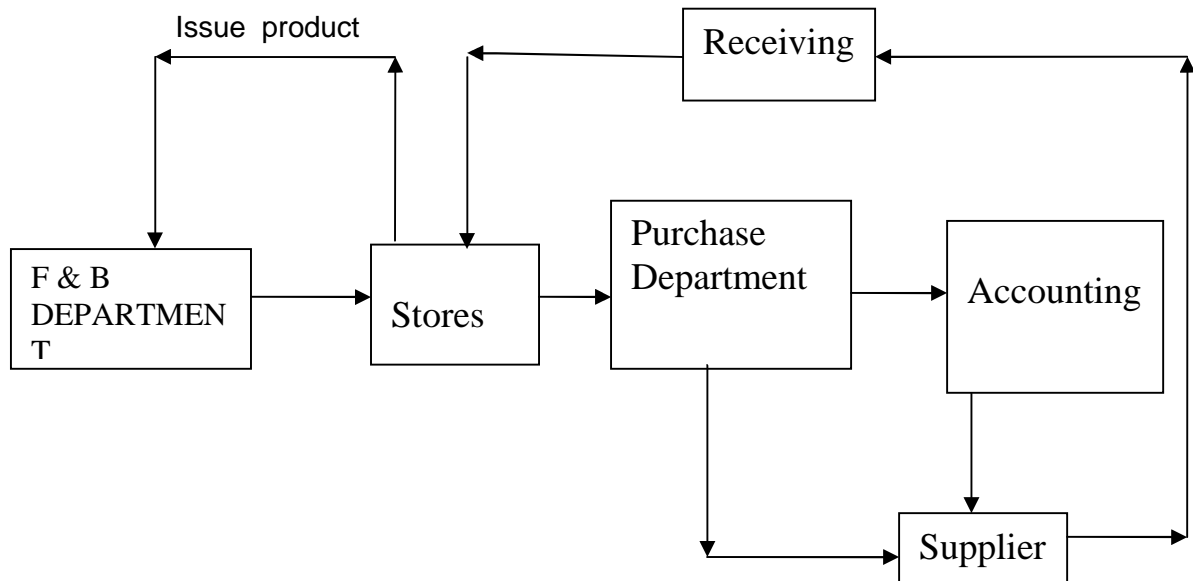
The first decision that needs to be made in purchasing is determining who will do it. It could be one of several persons depending on the size of the operation. In very large foodservice operations such as major hotels, hospitals, and college foodservices, a purchasing agent will do the buying. In smaller operations, it could be the general manager, production manager, or chef. Regardless of who does it, only one person should purchase any given item. This person is referred to as the buyer and is the sole person responsible for purchasing goods for an operation. Taking this approach eliminates any confusion regarding what was purchased and when. It also minimizes the risk of running out of a product or having too much of it on hand



### 3.3 PURCHASING OBJECTIVES

1. The buying practice must supplement a policy of minimum stock-holding
2. It must meet the requirements of all concerned departments.
3. The buying procedure which provides a food operation with the products should be most suited to its merchandising policy at the most economical price possible.
4. It must follow a set of standard specification for different products.

### 3.4 THE PURCHASE CYCLE:



1. Food and beverage Departments make the store requisition to the stores.
2. Stores if the product is available issues the product to the concerned dept.
3. When products in inventory reach a predetermined reorder point, the store room forwards a purchase requisition to the purchasing department.
4. The purchasing department orders required products from the proper supplier, by way of purchase order. Purchase personnel send copies of purchase order to the receiving and accounting departments.
5. The suppliers delivers the product to the receiving department along with a deliver invoice
6. The receiving clerk places the products in the storeroom and forwards the delivery invoice, perhaps with other documents, to the accounting department.
7. After further processing of necessary documents, accounting department personnel send payment to the supplier and file copies of the purchasing. Receiving forms for accounting and or control purposes.

This purchasing cycle is repeated every time products are ordered. You can see that purchasing is more than "picking up the phone and calling in an order". It is a complex cycle of activities requiring special planning and control procedures that create an audit trail. An audit trail is a series of records, documents, and or reports that trace the flow of resources thought an operation.

### 3.5 PREPARING STANDARD PURCHASE SPECIFICATION

In relation to the purchasing function, the term quality refers to the suitability of a product for its intended use. The more suitable a product, the higher its quality.

Decisions about quality requirements are first made when the goals of the business are established and subsequent marketing plans are developed. At that time, the spirit and intent of the food and beverage operation's quality standards are determined. Later, "**STANDARD PURCHASE SPECIFICATIONS**" are documented in detail to indicate the requirements for products suitable. For every intended purpose. These specifications provide detailed descriptions of the quality, size, and weight desired for particular items.

#### **Standard purchase specifications must:**

- Accurately describe minimum quality requirements
- Clearly and simply indicate the food and beverage operation's needs
- Realistically define needs, yet not limit the number of acceptable suppliers

These are the specification denoting the quality of food. These are very important for a purchasing officer or assistant dealing with daily food purchases. This does not necessarily mean buying the best and most expensive grade of any particular item. It does mean "the best grade sold to fit the need". The right grade where "Eye appeal" is important, such as in "Stuffed tomatoes" for salads, may well be the highest grade, but certainly such uniformity and expensive quality are not necessary where the tomatoes are to be cooked.

The standard purchase specifications should be written or printed on charges for all foods purchased by the Purchase Department of the hotel and displayed prominently- The staff of the purchasing department should be trained in quality buying according to the standard specifications displayed.

**FORMAT OF PURCHASE SPECIFICATION****HOTEL XYZ**

Name Of Food And Beverage Operation :

1. Product Name : \_\_\_\_\_
2. Product Used for:

Clearly indicate product use (such as olive garnish for beverage, Hamburger only for grill frying)

3. Product General Description:

Provide general quality information about desired product. Fro example “ Iceberg lettuce: heads to be green, firm without spoilage, excessive dirt or damage. No more than 10 outer leaves; packed 24 heads per case’.

4. Detailed description;

Purchaser should state other factors which help to clearly identify desired product. Examples of specific factors, which vary by product described may include

- |                     |                |                      |
|---------------------|----------------|----------------------|
| • Geographic origin | • Product size | • Medium of pack     |
| • Variety           | • Portion Size | • Specific Gravity   |
| • Type              | • Brand name   | • Container Size     |
| • Style             | • Density      | • Edible Yield, trim |
| • Grade             |                |                      |

5. Product test Procedures:

Test procedures occur at time product is received and as/after product is prepared/ used. Ex products to be at refrigerated temperature upon delivery can be tested with a thermometer.

6. Special instruction and requirements:

Any additional information needed to clearly indicate quality expectations can be included here. Examples include bidding procedures, if applicable, labeling and or packaging requirements and special delivery and service requirement.

### 3.6 SOURCES OF SUPPLY AND INFORMATION:

1. Wholesale supply houses : Buying from wholesale dealers does help in eliminating the middlemen and their profits and restore consistency and uniformity of quality, storage and delivery costs of goods purchased by the buyers.
2. Manufacturers and packers : These may sell their products directly to the buyers or wholesaler or both. Ice-cream, Condiments, and meats are some example of packed goods sold directly to the users.
3. Local Farmers and Producers \_ In some areas this group constitutes the major source of supply for fresh fruits and vegetables and for farm and dairy products.
4. Municipal markets – These offer many possibilities for good buys, especially fruits and vegetables. Although these markets are primarily for wholesalers, keen buyer who knows his operation and his product can obtain excellent values.
5. Retail food stores – A side from their availability for emergency use, some chains frequently offer advantageous prices to those who buy in bulk quantities.

#### INFORMATION:

In order to supplement the market quotation sheet and to provide a check against quoted prices, the food buyer should make use of sooth professional sources of market information. Central and state government releases information concerning commodity food prices and other valuable data, appear in daily newspapers and in mailed newsletters. Very often, prices of butter, oils, eggs and poultry etc, are based don an agreed mark up over such reported quotations. In addition, there are local trade sheets, radio programmes and commercial market reports, which give much useful information

### 3.7 SELECTION OF SUPPLIER

Managers of Food and beverage operation should choose suppliers carefully. Detailed purchase specification and objective calculations of quantities to order are ineffective without professional supplier. Essentially, the food and beverage manager bases supplier evaluation on the consistency of :

- Correct quality products
- Reasonable prices
- Prompt delivery
- Service, including product information

When selecting suppliers, the purchasers must consider a number of factors. Not every supplier who carries the needed product is appropriate for the food and beverage operation. A supplier can be easily selected from amongst those that buyer has recently purchased and that the quantity of goods received for price and service offered during the time when seeking a new supplier. Caution must be exercised and detail enquires made to cover at least the following points:-

- **Location:** Delivery time, transportation cost, and unexpected delays may be reduced if the supplier's facility is close to the food and beverage operation
- **Quality of the Supplier's Operation:** Such things as sanitation, in-house processing, handling of orders, and the quantity and quality of items in stock must be assessed.

- **Technical Ability of the Supplier's Staff.** Good salespersons are more than order-takers. They know their products and can help the operation resolve problems involving the products they supply.
- **Value :** The purchaser must carefully assess the supplier's prices in relation to the quality of products needed by the operation
- **Compatibility.** A good working relationship between the food and beverage purchaser and the supplier requires mutual beliefs about ethics and the fair treatment of both the guests and the supplier.
- **Honesty and Fairness:** These traits must be part of the ongoing business relationship and the supplier's reputation
- **Delivery Personnel. :** Their appearance, attitude, and courtesy contribute to the impression formed by the food and beverage operation.

Ideally ground work must be done to establish the size of company's range of products the size of processor, storage facilities, size of their transport facilities and members of the management team .

### 3.8 Purchase orders

Once the menu is planned, a number of activities must occur to bring it into reality. One of the first and most important stages is to prepare purchase orders according to the materials needed to produce the menu items. It is the food and beverage manager who generally bears the ultimate responsibilities for the preparation of the purchase orders.

#### **Problems that can arise when too much of a product is ordered include:**

Cash flow problems resulting from excessive money tied up in inventory Increased storage costs such as interest, insurance, and, sometimes, rented storage space Deterioration in quality, or damaged products Increased chance of theft and pilferage

Purchasing in sufficient quantities also has potential disadvantages such as dissatisfied guests due to stock outs, emergency and rush orders which are frequently expensive and time consuming, and lost discounts from volume purchases.

Generally in small hotels, food and beverage managers periodically access a number of factors that affect the purchase of proper quantities. It is important that control procedures be built into the actual purchasing process as well. For this purpose, large food and beverage operations use a purchase order system.

With a purchase order system, a purchase order is sent to the supplier awarded the order. Information about the order is retained in the purchasing department and is also circulated internally among the receiving and accounting departments. The purchase order commonly identifies the product quantity, unit cost, and the total cost that both the supplier and purchaser have agreed upon. In addition, the purchase order may include guarantees, warranties, payment requirements, inspection rights, "hold harmless" provisions, and other legal, contractual concerns.

A purchase order is the food and beverage operations report of the specifics of all incoming shipments. The property must pay the agreed upon price for no less than the agreed upon quality for the amount order. Higher than necessary food and beverage costs are frequently traced to communication and coordination problems among the several departments

or personnel involved in purchasing. Properly used, the purchase order minimizes these problems.

Rather than using purchase order system, smaller food and beverage operations may simply summarize purchase order information by using an in-house purchase order form.

The purchase record performs the same functions as the purchase order. It provides the food and beverage operations with a detailed record of all incoming shipments. Affected personnel in departments must know all the specifics about all the incoming food and beverage products. With out a written record, busy management staff may forget the details properly used, the purchase record helps to control higher than necessary food and beverage costs.

#### PURCHASE ORDER PROFORMA

PLOT NO 24 TIKKAL ROAD VIJAYAWAD PH : 0866- 2520531		HOTEL WESTIN PLAZA			PURCHASE ORDER NO 000 57876
DATE OF ORDER: 12-02- 2010					CHARGE ACCOUNT 2525 202
DATE REQUIRED 25-02-2010					SHIP TO : PO
QUANTITY	UNIT	ITEM	PRICE	PER	AMOUNT
3	CASES	APPLE CHUNKS	160	CASE	480
3	CASES	APPLE JUICE	240	CASES	720.
PURCHASER SIGNATURE					MANAGER SIGNATURE

A **purchase order** is a form listing the products to be purchased, their price, delivery date, and other important information.

It includes the following features:

- Unique number to identify the purchase order
- Name of the ordering restaurant or foodservice operation, its address, and its phone number
- Date of the order
- Signature of the person placing the order
- Supplier's name, address, phone number, and contact name
- Date of delivery, terms of payment, and any special instructions
- Each item to be purchased, the quantity and unit of the item, the item's unit cost, and the extended cost of the item
- Total cost of the order

### 3.9 METHODS OF PURCHASING

When purchasing food it is necessary to consider what the true cost of the item will be in relation to what the printed price list from the supplier states it to be..

There are seven main buying methods that may be used for purchasing foods. The particular method chosen often depends on the particular location of the establishment, the type and size of the business, the purchasing power and the type of food being purchased.

It is important for buyers to have accurate figures available of the consumption/ usage of major items so that they may decide which method of purchasing to use and also as essential data for the negotiation of the purchasing price.

The seven Methods are

- 3.9.1 Purchasing by Contract
- 3.9.2 Purchasing by Daily Market list
- 3.9.3 Purchasing by Weekly/fortnightly quotation list
- 3.9.4 Purchasing by Cash and Carry
- 3.9.5 Purchasing by paid reserve
- 3.9.6 Total supply
- 3.9.7 Cost plus

**3.9.1 Purchasing by contract** : There are two common types of contract used:

1. ***The specific period Contract*** which aims at determining the source of supply and the price of goods for a stated period of three or six months. This reduces the time and labour of negotiating and ordering to a minimum, plus it has the advantage of assisting with budgeting and pricing, when the prices of items are fixed for a period of time. Items with a fairly stable price, such as milk, cream, bread, etc. can be contracted in this way
2. ***The quantity contract*** which aims at ensuring continuity of supply of a given quantity of an essential item at an agreed price over a particular trading period. The purchase of frozen fruit and vegetables for used in a banqueting or a summer season are typical examples when the supply could be affected by the weather conditions with subsequent price fluctuation and where a quantity contract is advisable used.

**3.9.2 Purchasing by Daily Market List**

This method is used when purchasing perishable foods on a daily basis and when it is possible to have tow or more approved suppliers.

**3.9.3 Purchasing by Weekly / Fortnightly quotation list**

This method is used to purchase grocery items where a delivery of once a week or fortnight is adequate. The method is similar to that described when purchasing perishable foods by daily market list.

**3.9.4 Purchasing by “Cash and Carry”**

This method is of particular interest to the medium and small establishments whose orders are often not large enough to be able to get regular deliveries from wholesalers and food manufacturers. “Cash and carry” food warehouses are situated in all towns and resemble in layout and operation that of very large food supermarkets. The main difference is that “cash and Carry” food warehouses is only available to traders.

### **3.9.5 Purchasing by paid reserve**

This method is used when it is necessary to ensure the continuity of supply of an item for the menu which is of particular importance to a restaurant. Caterers are buying in advance a large quantity of a commodity to cover the needs for several months ahead, and requisitioning their weekly requirements from suppliers, who would hold the stock. Examples of products which are purchased by this method are frozen jumbo size pacific prawns and frozen fillets of beef

### **3.9.6 Total Supply**

This method is relatively new. It is a method offered only by a few major suppliers who are able to offer a full supply service of all commodities to caterers. This has the advantages of only having to negotiate with one supplier, a reduced volume of paper work and far fewer deliveries. The main disadvantage is that of being tied to one major supplier whose prices may not be competitive as when using several suppliers and whose range of certain commodities may be limited.

### **3.9.7 Cost Plus**

This is a method used frequently in the welfare sector of the industry. The establishment agrees to pay an approved supplier exactly the same price that the supplier paid for the commodities plus an agreed percentage, often 10-12%. The percentage would include the cost of handling delivery charges and a profit element for the supplies.

## **3.10 SUMMARY**

Purchasing and receiving are two key areas in the control process of the restaurant and foodservice industry. When a customer orders an item from the menu, the customer expects to receive what the menu has listed. If size, shape, color, grade, or portions are mentioned, then those food characteristics are what the customer expects and what the customer should receive. The person responsible for purchasing the items for the restaurant or foodservice operation must recognize this customer expectation and procure exactly what is stated on the menu

This chapter introduces you to the purchasing process and various factors that need to be considered to ensure that your customers' food and menu expectations are met or exceeded. It will also present a variety of methods you can use in purchasing

## **3.11 REFERENCE BOOKS**

1. FOOD COSTING BY JAGMOHAN NEGI
2. FOOD AND BEVERAGE MANAGEMENT BY BERNARD DAVIS, ANDREWS, AND SALLY STONE

**LESSON WRITER  
P. CHANDRA SHEKAR**



## LESSON 4

# RECEIVING, STORING AND ISSUING

### 4.0 Objective:

The objective of this lesson is to know about procedures of Receiving, Storing and Issuing and its importance in Controlling the cost.

### CONTENTS:

- 4.1 Introduction
- 4.2 Objectives of Receiving
- 4.3 Receiving Procedures
- 4.4 Request for Credit Memo
- 4.5 Meat Tag
- 4.6 Storing Food
- 4.7 Store Records
- 4.8 Issuing Foods
- 4.9 Summary
- 4.10 Self Assessment Questions
- 4.11 Reference Books

### 4.1 INTRODUCTION

In many catering establishments the receiving department, mistakenly, is not considered to be a very important one, and it is often staffed by people with little or no specialized knowledge. Unless this department operates efficiently, it becomes almost a waste of time for the purchasing manager to prepare purchase specification and to negotiate price and trading terms with suppliers. It also then becomes the weak link in the food control cycle and nullifies all effort in the rest of the control cycle.

It is important to realize that all goods being received into an establishments have a monetary value and that it is essential to ensure that exactly this value in goods is properly accounted for and received. It is also important to remember that often these goods will have a selling value several times their original purchase in price in a matter of hours.

### 4.2 OBJECTIVES OF RECEIVING

The main objectives are to ensure that

1. The quantity of goods delivered matches the quantity which has been ordered. This means that all goods will have to be weighed for/
2. The quality of goods delivered is in accordance with the specification stated on the purchase form.
3. The prices stated on the delivery note are in accordance with the prices on the purchase order for
4. When the quality or quantity of the food delivered is not in accordance with the purchase order or an item is omitted from the order a "request for credit note" is raised by the receiving clerk. When this happens with daily delivery of perishable

foods it is essential that the purchasing manager is informed as an alternative source of supply or possible product may have to be found quickly to minimize any inconvenience to the production department

5. An accurate record is made in the goods received book recording details of the delivery.

For these objectives to be achieved it is essential that staff employed in this department are trustworthy and fully trained in the clerical procedures and in quality inspection and also that the staff are provided with the adequate facilities to do the the job properly, such as a large and well lit area, large scales with fare weights, copies of all purchase specifications and an office with a telephone.

### 4.3 Receiving Procedures

Control procedures adopted by food and beverage operations include the following.

1. Check incoming products against purchase orders or purchase records: Obviously, the property does not want to accept items it did not order, receive partial or no deliveries of required products, receive items of unacceptable quality, or pay a price higher than that agreed upon. These problems can be prevented by comparing incoming products against an in-house record of the purchase agreement.

2. Check incoming products against standard purchase specification: This requires knowledgeable and skilled receiving personnel. They should not allow themselves to be rushed by the delivery persons. Sometimes the suppliers will agree to deliver products at their risk, allowing the buyer to sign and send invoices after inspecting deliveries. Cooperation in receiving is an important item to consider when selecting suppliers.

3. Check incoming products against delivery invoices: The supplier provides the delivery invoice, which becomes the basis for subsequent payment claims. A definite policy must be developed, implemented, and enforced for the measuring, weighing, or counting of incoming products to ensure that the proper quantity of product is delivered and billed. Typically, it is not practical to weigh or count every case of product being delivered. It is helpful, however, to routinely weigh/count-selected cases on a random basis. Suppliers or delivery persons are less likely to short-weigh a count if they expect random inspections. Likewise, price information on the invoice should be verified by reviewing the purchase order or purchase record. Any discrepancies should be handled by a request-for- credit memo.

Accepting incoming products. This is normally done by signing the delivery invoice. At this point, ownership of the products is transferred to the property, and the products become the responsibility of the food and beverage operations.

Move accepted products to storage immediately. Security to minimize employee theft is a concern here. Likewise, the quality of products needing low-temperature storage will deteriorate if they are left at room temperatures, which are frequently very warm in back-of-the-house production areas.

#### 4.4 Request for Credit Memo

XYZ Hotel						
To,			No			
			Date :			
Please issue your credit memo for items listed below					Cost	
14	lb	Frozen Calf Liver	3	80	53	2
50	lb	Topside of Beef	2	20	110	0
Reason : 1. Liver not delivered but invoiced 2. Beef not as per specification						
Food and Beverage Controller		Accounting Dept	Delivery Persons	Requested by		

Every time a delivery invoice is modified at that time of receiving, a request-for-credit memo becomes necessary. For example, if the deliveries do not include the fully quantity specified on the delivery invoice, are refused because of quality problems, or are rejected for any other reason, this is noted on the request for credit memo. The following procedures should be used to process a request-for-credit memo.

##### Note problems with items on the invoice

Complete the request-for-credit memo, have the delivery person sign it, and return a copy to the supplier along with the delivery invoice.

Attach the property's copy of the memo to its copy of the delivery invoice.

Call the supplier to advise that the original invoice has been amended by a request-for-the credit memo.

If the short or refused products are subsequently delivered, a separate invoice can accompany the items. The new invoice is processed in the usual manner.

## 4.5 MEAT TAG

In the majority of catering establishments such items of food as meat, special processed meats such as hams, and fish such as smoked salmon, constitute the most expensive of the purchased foods. Because of this high cost it is not uncommon for units operating a detailed control system to set up a form of special control of these items

Tagging expensive food serves many purposes

1. It aids the control of expensive foods.
2. It requires the receiving clerk to weigh and record each item, and to check against the specific purchase specification weight range.
3. It assists in obtaining a more accurate daily food cost percentage figure
4. It assists in controlling the stock levels of these items

The operation of tagging of expensive items is as follows.

1. On receiving the items they are checked against the purchase specification as to being acceptable or not
2. If suitable, a tag is made out for each item received, with the main information being taken from the invoice or delivery note. The weight recorded on the tag is obtained by actually weighting each item individually.
3. The tag is then separated along the perforation with the control office copies being sent direct to control with the invoice or delivery note and kitchen copy being attached by string or wire to the food item.
4. When the item is issued, at a later date, to the kitchen for use the tag attached to the item is removed and sent to control with the date of issue filled in.
5. The control office will usually operate a reconciliation of meat tags form, recording the tags received from the receiving department and from the kitchen. Thus the total value of tags of each specific expensive item would be known for
  - a) Daily purchases
  - b) Daily issues to the kitchen for immediate use
  - c) Balance shown would give the stock value of those items

### MEAT TAG PROFORMA

MEAT TAG		NO 22927
Item	Beef	
Cut	Rib	
Total Weight	22 lb	
Total Value	Rs 39.60	
Cost/lb	Rs 1.80	
Supplier	Tombard Meat Co	
Date Received	5/2/2010	
Date Issued	12/2/2010	
Food Control Copy		
-----		
MEAT TAG		NO 22927
Item	Beef	
Cut	Rib	
Total Weight	22 lb	
Total Value	Rs 39.60	
Cost/lb	Rs 1.80	

Supplier	Tombard Meat Co
Date Received	5/2/2010
Date Issued	12/2/2010
FOOD STORE COPY	
SEND TO FOOD CONTROL ON DAY OF ISSUE TO KITCHENS	

## 4.6 STORING FOOD

The main objective of a food store is to ensure that an adequate supply of foods for the immediate needs of the establishment are available at all times.

Foods when accepted at the receiving department are categorized as perishable and non-perishable items. The perishable items go straight to the kitchens, where they would be stored in either refrigerators or cold rooms depending on the item. Perishable foods going direct to the kitchen are often referred to as being on direct charge in that they will usually be used within one to three days of delivery by the kitchen ideally, meat, fish; dairy produce, fruit and vegetables, and deep frozen foods should be stored separately from each. The non-perishables items go to a food store where they are unpacked, checked for any damages and placed on racking. The layout for the stores normally takes the form of either

1. Having items that are issued daily being located near to the door where issues are made, with the remainder being arranged in a logical sequence
2. grouping of commodities together for example, all canned foods, dried foods, etc, each arranged into sections.

What is important is that the layout chosen should be one that minimizes the distance walked by the storekeeper. When this is determined the stock-taking list should be printed in the same order in which items appear in the stores so as to enable stock-taking to be done quickly and efficiently.

There are many reasons why strict storage and issuing controls are needed in food and beverage operations. And it is very important to move food and beverage products into storage areas as soon as they are received. The principles of effective storage systems for both food and beverage products focus on three primary concerns.

- Keeping products secure from theft
- Retaining product quality
- Providing information necessary for the financial accounting system

## 4.7 STORE RECORDS

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

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

## Requisition Slip Proforma

Department..... Date .....

FOOD ITEM	UNIT	AMOUNT REQUIRED
-----------	------	-----------------

Signature of Requisitioning  
Authority

It is customary to put in requisition slips to the stores at least one day in advance, so that the food items required for the next day are collected and issued in time for food preparation.

**Order Form:** An order must be signed by a person authorized to do so. Generally, the catering manager authorizes purchases in a small establishment, and a purchasing manager in an establishment which has a purchasing department. Three copies of an order are prepared, one each for supplier, ordering department and stores incharge who would receive the goods when they arrive.

## Order Form Proforma

ORDER			
FROM :	LUCKY RESTAURANT	REF	:
	LR/84/3991		
TO :	FOOD SUPPLIERS LTD	DT	:
	20.04.10		
Please supply the following items by 27.4.10			

ITEM	QUANTITY	UNITS	VALUE
------	----------	-------	-------

Signature

(MANAGER)

## 4.8 ISSUING OF FOOD

This should take place at set times during the day and only against a requisition note signed by an authorized person, for example head chef or restaurant manager. When the requisition is a larger one its should be handed in several hours before the items are required to allow the store keeper plenty of time to collect all the food items together. The pricing of issues is usually at the "as purchased price", ignoring any small discounts. This is made easy in the case of non-perishable foods by marking the current price on all items when they first come into

the store. The pricing of perishable items is often done by the control office after they have been issued as they have access to the suppliers 'invoices'.

### **ISSUING PROCEDURES**

First in, first out (FIFO)

The FIFO approach assigns the first, or earliest, product costs to issues—in other words, it values issues in the order in which the costs were incurred. As a consequence, the products in storage are valued in the reverse order. That is, since the earliest product costs were applied to the products that were issued, the most recent product costs are applied to the products left in inventory.

By using the FIFO method, we value issues by assigning cost in the order in which they were incurred; consequently, we value inventory by assigning the most recent costs before earlier costs.

Last-in, first out (LIFO)

The LIFO approach assigns the last, or most recent, product costs to issues. As a consequence, the products in storage are valued in the reverse order—in other words, the order in which the costs were incurred. That is, since the most recent product costs were applied to the products that were issued, the earliest product costs are applied to the products left in inventory.

Using the LIFO method, we value issues by assigning recent costs first.

## **4.8 SUMMARY**

In many catering establishments the receiving department, mistakenly, is not considered to be a very important one, and it is often staffed by people with little or no specialized knowledge. Unless this department operates efficiently, it becomes almost a waste of time for the purchasing manager to prepare purchase specification and to negotiate price and trading terms with suppliers. It also then becomes the weak link in the food control cycle and nullifies all effort in the rest of the control cycle.

It is important to realize that all goods being received into an establishments have a monetary value and that it is essential to ensure that exactly this value in goods is properly accounted for and received. It is also important to remember that often these goods will have a selling value several times their original purchase in price in a matter of hours.

## **4.10 SELF ASSEMENT QUESTIONS**

1. What in detail the objectives of receiving and procedures of receiving food?
2. What are the records maintained in the receiving department and explain them?
3. What is Meat Tag ? Draw a neat Proforma of Meat Tag and explain?
4. Write a note on
  - a) Storing
  - b) Issuing

## **4.11 REFERENCE BOOKS :**

1. Food and Beverage Management : Davis, Andrew and Sally
2. Catering Management : Mohini and Surjeet

**LESSON WRITER  
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## LESSON 5

# PRICING

### 5.0 Objective:

The objective of this lesson is to know about procedures of Pricing and its impact on costing

### CONTENTS:

- 5.1 Introduction
- 5.2 Methods of Pricing
- 5.3 Factors affecting pricing
- 5.4 Making pricing decision
- 5.5 Summary
- 5.6 Self Assessment Questions
- 5.7 Reference Books

### 5.1 INTRODUCTION

The process of determining what to charge the customer for food items, menus or services, may be termed as 'pricing'. In commercial catering, prices depend a great deal on market trends because the proportion of fixed costs is relatively high and the profit margins expected are far greater than those for social institutions. The latter include hostels, schools, lunchrooms, homes for the handicapped, and so on. In these pricing takes on a cost-effective rather than a profit making goal

There is a definite relationship between the price level and the volume of sales. High prices are almost always accompanied by a low volume of sales. In food service establishments however, the volume of sales is the most important determinant of profitability. Therefore, if the right price levels are not arrived at, the desired volume of sales cannot be achieved. Thus the pricing policy is the most critical factor in the assessment of the viability of an establishment more so when there is increasing competition in the field of food service.

Further, technological changes have altered the existing cost structures by shifting the emphasis from one type of cost to another.

### 5.2 METHODS OF PRICING

There are different methods of menu pricing prevalent in food service operations. One can adopt, compile or modify any of these methods as per the situation and use it in his/her establishment

#### 1. NON-STRUCTURED METHOD

This is the most simplest system of menu pricing. In this system you simply go to someone else's food service operation, takes his menu away and copy his prices.

#### 2. FACTOR METHOD

To determine the menu sales price, the raw food cost is multiplied by an established pricing factor. Establish the food cost you like to have, say 40% then divide this into 100 and come up



with 2.5 as a factor. By multiplying the raw food cost by the multiplier factor, the menu price could be established. Thus

$$\text{Menu Sales Price} = \text{Raw Food Cost} \times \text{Pricing Factor}$$

The second way to compute this is to divide the known or desired food cost percentage into the actual cost ( taken form a standardized recipe) to determine the selling price

For example , suppose actual cost is Rs 300

$$\text{Selling Price} = \frac{300 \times 100}{40} = \frac{3,000}{4} = \text{Rs. 750}$$

The factor system is popular in food service operation. It is the easiest way to price a menu. This system has two aspects that should be given special Consideration:-

- i) Based on 40% food cost, 60% of the income to cover all expenses beyond food.
- ii) Until the end of the month it is not possible to know whether or not other expenses will exceed 60%, so pricing is being done on an unsound basis

### 3. PRIME- COST METHOD

This method was developed by H.H.Pope of St. Louis and used in Cafeteria Operations. In this method a food item is determined from a standardized receipt used. The prime cost includes direct labour- labour involved in the actual preparation of the product.

Multiply the prime cost by the factor to get the menu price. To establish this factor, deduct the amount of direct labour from the total labour cost. If food cost is 40%, let us assume 30% as labour cost. Make an assumption that one –third of the labour cost is direct labour. Working from 60% rounded off margin, substract 10% for direct labour cost, then there will be margin of 50%. 50% margin divided into 100 gives you a factor of 2.0. Therefore, the selling price or menu price will be calculated as follows:-

$$\begin{aligned} \text{Prime cost} \times \text{Factor} &= \text{Menu Price} \\ \text{i.e } 375 \times 2 &= \text{Rs } 750 \end{aligned}$$

### 4. COST PLUS METHOD

This method involves the calculation of the food cost per unit of sales and then a given percentage of gross profit is added to the value to arrive at the selling price per unit. Then percentage is intended to cover the cost o labour and overhead expenses while also leaving a margin of net profit. The net profit percentage required will depend on the pricing policy of the particular establishment. Food operations generally add 150 percent of food cost

Example

If the ingredients or food cost of a dish is 90 pice, the selling price would be

$$90 \text{ p} + 90\text{p} + 45\text{p} = \text{Rs. } 2.25 \text{ p}$$

$$\text{Or } 90 + (90 \times 150 / 100) = \text{Rs. } 2.25$$

$$\text{Or simply } 2 \frac{1}{2} \text{ times food cost i.e, } 5 / 2 \times 90 = \text{Rs. } 2.25$$

The cost plus method is easy to apply and understand and is therefore widely used. It has however, certain disadvantages like:

- a) Cost plus pricing is based on cost, and does not take into account the demand for the product or service. Its indiscriminate use, therefore, becomes irrational

- b) Net profit becomes the direct function of sales turnover
- c) The gross profit-margin is added to the food cost and the net profit is unrelated to the capital invested.

### 5. RATE OF RETURN PRICING

This method is based on the relationship of net profit to capital investment. By this method the likelihood of reaching net profit targets, is greater, provided that the estimated sales volume is achieved and the gross profit margins are maintained. The rate of return method of pricing, however, also has some disadvantages:

- a) It is purely profit-oriented and has little scope for flexibility
- b) Its approach to pricing problems is too simple to be realistic
- c) It does not generally go by the demands of customer or the market

At best, the above methods can be useful in evaluating performance, or act as basic guide in pricing. They are, however, not useful in appraising investments

## 5.3 FACTORS AFFECTING PRICING

### LOCATION OF THE FOOD SERVICE

The situation of a food service establishment will affect greatly the prices charged to the customers. It is common experience to find that a coffee shop situated in a market place, where the volume of sales expected is higher, would price products slightly lower than if it was situated in posh residential area. In the latter, the occasional customer would have to be charged not higher fixed costs per unit of sales incurred by the establishment. However, location has less importance for a luxury restaurant because people who choose to go to them are usually willing to travel to enjoy them

### SIZE AND TYPE OF ESTABLISHMENT

The size and appearance of the establishment has a marked effect on the price structure of the menu. For example a plate of sandwiches or 'pakoras' sold at a wayside 'dhaba' or café may be priced at Rs. 2/- while the same portion in a coffee shop would be priced at Rs. 1 and in a restaurant they could be Rs.10 to Rs. 20. The food cost is the same as the portions are unchanged, so the reason for the difference in the prices, is obviously increased fixed costs of larger and better decorated and maintained premises

### THE MENU

The composition of the menu determines the pricing because of the direct relationship between food cost and selling prices. When sales are slack cheaper substitute ingredients for dishes helps to reduce food cost without changes in the prices normally charge. This helps to increase the profit margin and offset the impact of lowered sales volume. Similarly, changes in consistency or texture can affect portions served, and consequently the prices charged. The prices determined will also be affected by whether the menu planned is a set one or an a la carte one. The larger the variety offered in the menu, the greater will be the range of prices charged. The limited menu will almost always have a fixed range of prices.

### SERVICE METHOD

The nature of the service offered to customers has its effect on pricing. For instance, if a self-service system is followed, the prices would not be required to cover the service charge. Besides the turnover of customers, is expected to be faster leading to a greater sales volume. And therefore a lower food cost percentage of sales, and a consequent lower price structure. On the other hand a traditional waiter service puts up the prices because of the higher staff costs

necessary, more space needed to serve and seat the customer, greater amounts of cutlery, crockery and table appointments required and so on.

## 5.4 MAKING PRICING DECISION

Pricing decisions are generally made at higher levels of management from where the establishment can be viewed in its total perspective, with an understanding of the impact of different pricing, policies on profitability. Pricing decisions are affected by the elasticity of demand the cost structure of the enterprise and its pricing policy.

The more elastic the demand the greater is the scope for an imaginative pricing policy. All pricing decisions are governed by the policies laid out for particular establishments. These are related to price, costs, demand and profit margins. Pricing has always been a challenge to the caterer because he deals with a large quantity of perishable commodities. It is therefore important to be able to understand the behavior of all costs, and to predict the impact of changes in them on the profitability of a food service operation.

## 5.5 SUMMARY

The process of determining what to charge the customer for food items, menus or services, may be termed as 'pricing'. In commercial catering, prices depend a great deal on market trends because the proportion of fixed costs is relatively high and the profit margins expected are far greater than those for social institutions. The latter include hostels, schools, lunchrooms, homes for the handicapped, and so on. In these pricing takes on a cost-effective rather than a profit making goal

There is a definite relationship between the price level and the volume of sales. High prices are almost always accompanied by a low volume of sales. In food service establishments however, the volume of sales is the most important determinant of profitability. Therefore, if the right price levels are not arrived at, the desired volume of sales cannot be achieved. Thus the pricing policy is the most critical factor in the assessment of the viability of an establishment more so when there is increasing competition in the field of food service.

Further, technological changes have altered the existing cost structures by shifting the emphasis from one type of cost to another

## 5.6 SELF ASSESSMENT QUESTIONS

1. Explain the usual method of costing which is used in most of the food and beverage businesses. What are its advantages and disadvantages?
2. Write a note on
  - a) Menu pricing
  - b) Cost plus pricing
  - c) Non structured method
  - d) Factor method
  - e) Prime cost method
  - f) Rate of Return pricing

## 5.7 Reference Books

Catering Management : Mohini and Surjeet  
Food and Beverage Costing : Jagmohan negi

**LESSON WRITER**  
**P. CHANDRA SHEKAR**

## LESSON 6

# LABOUR COSTING

### 6.0 Objective:

The objective of this lesson is to know about Labour cost and its calculation and its impact on pricing and costing

### CONTENTS:

- 6.1 Introduction
- 6.2 Labour Cost
- 6.3 Labour Cost Statement
- 6.4 Direct Labour Cost
- 6.5 After Wage Profit
- 6.6 Summary
- 6.7 Self Assessment Questions
- 6.8 Reference Books

### 6.1 INTRODUCTION

All labour costs expended in processing and production of the product are known as direct labour cost. In simple words, it is that labour which can be conveniently identified or attributed wholly to a particular product or process or dish or expended in converting raw materials into finish the product.

### 6.2 LABOUR COST

Labour cost is the second largest element of cost after food cot. It comprises all cost of employing staff whether paid in casg or in any other way. Thus labour cost includes payment made to the following groups of employees

1. Employees engaged on the actual production of the product or in carrying out of an operation or process
2. employees engaged in aiding the production by way of supervision, maintenance, setting of equipment, transportation of material etc. and
3. Inspections, analysis specially required for such production.

The staff cost paid in cash is collected from the following sources

- a) **Cash-**
  - (i) Monthly payroll which includes gross pay, insurance (health) Bonus, CFF contribution Etc.
  - (ii) Petty Cash – Casual labour and Part Time labour
- b) **Kind :** There will be staff cost incurred in kinds such as
  - (i) cost of Staff Meals
  - (ii) Accommodation supplied to staff

In many hotels and food and beverage operations the largest single items of costs is no longer food but wages. Therefore, the control of labour cost is as important as the control of food and beverage costs. There are two elements of labour costs that need to be controlled.

- 1 The time taken, and
- 2 The rate of pay

Many elements of labour costs are largely controllable. Most managers, prefer to have a regular report of the number of hours worked broken down by job category. Increased benefits, shorter working weeks and growth of trade unionism will push up the costs of employing hotel service personnel. This required utilization of human resources. The managers are more excited in their system of planning and control

#### Compactors of labour cost

Comparators Applications	Areas to Focus	
Cost Percentage hotels Restaurant	Variable nature of Labour Costs	Commercial
Monetary Value Catering	Fixed nature of labour costs	Institutional
Men Hours Covers per man hours Variable Jobs	Efficient Productivity Efficient Productivity	Fixed jobs
Average hourly rate Sectors	Proper selection and rostering	All

### 6.3 LABOUR COST STATEMENT

Analysis of payroll of an operation is required so that labour costs may be effectively monitored and corrective action taken whenever necessary. In case of small unit of sales such as a dish, labour cost is allowed for by reference to appropriate percentage of selling price. This calculated on the basis of monthly labour cost statement. This statement contains information about the labour cost for each revenue producing department. One can easily find out the relationship of cost to turnover and compare the same with the past performance or budget. One will also know whether the calculated labour cost percentage is reasonable in each department.

ABC HOTEL LTD  
MONTHLY LABOUR COST STATEMENT  
MONTH ENDING.....

	Rs	%	Last Year	%
Total				

Note

## 6.4 DIRECT LABOUR COST

It includes the cost of wages paid to employees who are immediately concerned with the manufacture of the product and contains cost of employees and staff both in terms of cash and kind. It is calculated from payroll plus any payment made for casual labour. The following items are included under direct labour cost:-

1. Salary and Wages
2. Cost of Employees Meals
3. Staff Accommodation
4. Contribution to CPF/PF & Pension
5. Employees Health Insurance (ESI)
6. Bonus
7. Commission
8. Other Cash Payment
9. Other Non-Cash Benefits

DIRECT MATERIAL + DIRECT LABOUR = PRIME COST

## 6.5 AFTER –WAGE PROFIT

The excess of sales over the cost of materials and labour costs is expressed as after-wage profit. The food and beverage establishments operating at a high percentage of labour costs and these subject to seasonal fluctuation in sales, require to control their labour costs. These establishments require an adjustment of labour costs to the changing pattern of sales revenue.

AFTER –WAGE PROFIT = SALES – (MATERIAL COST + LABOUR COST)

## 6.6 SUMMARY

All labour costs expended in processing and production of the product are known as direct labour cost. In simple words, it is that labour which can be conveniently identified or attributed wholly to a particular product or process or dish or expended in converting raw materials into finish the product

Labour cost is the second largest element of cost after food cost. It comprises all cost of employing staff whether paid in case or in any other way. Thus labour cost includes payment made to the following groups of employee's

- Employees engaged on the actual production of the product or in carrying out of an operation or process
- employees engaged in aiding the production by way of supervision, maintenance, setting of equipment, transportation of material etc.;
- Inspections, analysis specially required for such production.

## **6.7 SELF ASSESSMENT QUESTIONS**

1. Write in detail about Labour cost and different methods of Labour cost.?

## **6.8 REFERENCE BOOKS**

**Food Costing : Jagmohan negi**

**LESSON WRITER  
P. CHANDRA SHEKAR**

## LESSON 7

# OVERHEAD COST

### 7.0 Objective:

The objective of this lesson is to know about overhead cost and its impact on pricing and costing

### CONTENTS:

- 7.1 Introduction
- 7.2 Overhead Cost
- 7.3 Classification Of Overhead Cost
- 7.4 Fixed Expenses
- 7.5 Variable Expenses
- 7.6 Semi – Variable Expenses
- 7.7 Summary
- 7.8 Self Assessment Questions
- 7.9 Reference Books

### 7.1 INTRODUCTION

Indirect costs are also known as overheads or burdens. All Costs other than material and labour costs are known as Overhead costs. It includes all expenses of running the establishment. All costs need to be related to a suitable unit of output usually referred to as 'cost Unit.

### 7.2 OVERHEAD COST

In food and beverage establishment a cost unit may be expressed as :--

1. A dish
2. A table d'hote ( a complete meal)
3. A banquet

Cost of the food *i.e.* direct material is the only element which can be classified as being direct to a meal / dish. Thus overhead includes all expenses for running the business such as:--

1. Rent and rates,
2. Gas, Fuel and Electricity
3. Printing and Stationery
4. Advertising
5. Depreciation of Equipment
6. Cleaning
7. Laundry
8. Cleaning Material
9. Repair and Renewal
10. Administration and General
11. Insurance
12. Telephone



13. Legal Fee

14. Any other expenses falling under the head of food cost and labour cost

In general terms, overhead comprise all expenses incurred for or in connection with the general organization of the whole or part of the undertaking i.e the cost of operating supplies, and service includes the maintenance of capital assets. The main group on which overheads may be sub-divided are :--

- a) Manufacturing overheads
- b) Administration overheads
- c) Selling Overheads
- d) Research and Development Overheads

### 7.3 CLASSIFICATION OF OVERHEADS

Overheads may be classified as

- a) Indirect Materials
- b) Indirect Labours
- c) Indirect Expenses

Overheads may be defined as those expenses which are not capable of being identified with a particular unit of sales but which nevertheless form part of the total cost. In the hotel and catering business all expenses other than food cost and labour cost are treated as overheads. Some of the most commonly incurred overhead expenses are:--

- a. Rent
- b. Rates
- c. Insurance
- d. Heat, Light and Power
- e. Gas, Electricity and Fuel
- f. Postage printing and stationary
- g. Telephone
- h. Advertising and Sales Promotion
- i. Repair and Maintenance
- j. Renewals
- k. Cleaning and Laundry
- l. Motor Expenses
- m. Depreciation
- n. Bank Interest and Charges
- o. Loan Interests
- p. Interest on Capital Invested
- q. Legal fees
- r. Audit Fees
- s. Sundry Expenses

From the point of view of behaviors of costs in response to changes in volume of sales, it is possible to divide the overheads into three main categories

- 1. Fixed overheads
- 2. Variable overheads
- 3. Semi- Variable overheads

Thus all overhead expense fall into three main categories

## 7.4 FIXED EXPENSES

Expenses which are fixed in amount irrespective of how much business is done are known as fixed expenses. The amount of the expenses for the year is known and apportionment of this amount to different parts of the year will depend only on how much time is involved.

Fixed costs tend to remain unaffected by changes in the volume of business. The hotels are involved in high cost business. High fixed cost means high gross profit margin which in turn, mean each addition in revenue will have substantial rise in net profit. The high the percentage of fixed costs, the more difficult it is to maintain adequate profitability through cost manipulation. Whatever the sales, fixed costs remain constant and they accrue with the passage of time and are therefore, sometimes referred to as period costs.

He main examples of such expenses are :-

1. Rent
2. Rates
3. Insurance
4. Depreciation
5. Mortgage Interest
6. Legal Fee
7. Audit Fee
8. Interest on Capital Employed
9. Bank Interest and Charges
10. Motor Expenses and Charges
11. Administration
12. Repairs and Maintenance
13. Employees Remuneration and Benefits

## 7.4 VARIABLE EXPENSES / VARIABLE OVERHEAD COSTS

Variable costs generally vary in direct proportion to changes in the volume of sale. These costs increase or decrease in amount as the volume of activity rises or falls. These costs will mainly be in respect of the cost of goods sold. In the case of hotel business, an average for these costs would be 32% of turnover, but this percentage would differ according to whether the hotel is accommodation biased, food biased or liquor biased. Examples of these costs include, food cost of a dish, minimal extra costs of laundry and cleaning in case of a sale of a room, beverages costs etc. When the sale volume of food and beverage increases by 15% there is normally a 15% increase in food and beverage costs and vice versa.

Thus these expenses vary with the amount of turnover, although not necessarily in proportion. Some of the expenses of this category are

1. Cleaning
2. Laundry
3. Breakages
4. Maintenance and repair
5. Dishwashing
6. Printing and stationary
7. Postage

8. Transport and Fare
9. Maintenance Contract
10. Sales promotion cost
11. Housekeeping supplies
12. Advertising
13. Travel agents commission
14. Band and Artists
15. House Telephone and Rentals
16. House Telephone and Rentals
17. Gas , Electricity and Fuel oil
18. Video cost.

## 7.5 SEMI – VARIABLE OVERHEAD COSTS

These overheads tend to vary with changes in volume of sales but not indirect proportion to the change. These costs remain constant over a relative short range of sales volume but change to a new level with an increase or decrease in the volume of activity. These costs are a mixture of fully fixed and fully variable costs. When the variable element is high a 100% change in sales will often result in as much as 75% change in semi-variable costs, and where the fixed element is high at 100% change in sales may result in only a very little change in semi-variable cost.

In this case certain minimum cost is inevitable and beyond that point the amount will rise as more business is done. Cost of light and heat may be such as constant amount as to be a fixed amount as to be a fixed expense, or it may vary with the business done.

A broad classification of semi-variable costs is given below—

1. *Telephone Charges.* It is made up of fixed periodical rental and the number of calls made.
2. *Heating:* Permanently heated areas and room heated due to increase in occupancies
3. *Cost of labour in seasonal establishments.*

Examples of such expenses are : --

- 1 Lighting and Heating -- gas, electricity and fuel (heat, light and power)
2. Telephone
3. Repair and Maintenance
4. Advertising and Display
5. Postage, Printing and Stationery

In the areas of hotel accounting, it is easier and most suitable for analyzing purposes, if these overheads are divided into two categories -- fixed and variable. This classification is most useful and suitable in the following areas

1. Calculating break-even point and other useful information
2. Determining price structures
3. Decision accounting and other latest techniques of accounting analysis

## 7.7 SUMMARY

Indirect costs are also known as overheads or burdens. All Costs other than material and labour costs are known as Overhead costs. It includes all expenses of running the establishment. All costs need to be related to a suitable unit of output usually referred to as 'cost Unit.

## 7.8 SELF ASSESSMENT QUESTION

1. Define Overhead Cost? Write in detail about Classification of Overheads
2. Write a short note on
  - a) Fixed Cost
  - b) Semi Variable Cost
  - c) Variable Cost

## 7.9 REFERNCE BOOKS

FOOD AND BEVERAGE COSTING :JAGMOHAN NEGI

**LESSON WRITER  
P. CHANDRA SHEKAR**

## LESSON 8

# PRODUCTION CONTROL / VOLUME FORECASTING

### 8.0 Objective:

The objective of this lesson is to know about production control and volume forecasting

### CONTENTS:

- 8.1 Introduction
- 8.2 Volume Forecasting
- 8.3 Initial Forecasting
- 8.4 Final Forecasting
- 8.5 Aids in Volume Forecasting
- 8.6 Standard Recipe
- 8.7 Portion Control
- 8.8 Converting Recipe to Serving Portion
- 8.9 Standard Portion Sizes
- 8.10 Determinant of Portion Sizes
- 8.11 Summary
- 8.12 Self Assessment Questions
- 8.13 Reference Books

## 8.1 INTRODUCTION

Production control means the controlling of the the preparation of food which together should reduce over-production (and possible waste), loss from inefficient purchasing and processing, and loss from excessive portion sizes. The proper operation of the food control system should aid management in controlling food accosts efficiently and maximizing the profitability of the operation. There are four major stages in production control

- 1) Volume forecasting
- 2) Standard Yield
- 3) Standard Recipes
- 4) Standard Portion Sizes

## 8.2 VOLUME FORECASTING

Volume forecasting is often referred to as production planning. It is a method of predicting the volume of sales fro a establishment for a specified future period.

The objective of volume Forecasting are:--

- 1) To predict the total number of meals to be sold in each selling outlet of an establishment at each meal period(e.g. the number of break-fasts to be served in the dinning hall and the coffee shop and by floor service.)
- 2) To predict the choice of menu Items by customers

- 3) To facilitate purchasing
- 4) To ensure availability of all necessary ingredients
- 5) To ensure that appropriate stock levels are held
- 6) To control food costs in relation to sales
- 7) To enable the food controller to compare the actual volume of business done by each of the selling outlet with the potential volume of business as forecast and for management to take action where necessary. The comparison may be by total volume of sales, by total number of customers, by total number of main course items

Volume forecasting is generally done in two stages - an initial forecast and final forecast

### 8.3 INITIAL FORECASTING

It is generally prepared a week in advance and shows

- a) the estimated total number of meals to be taken in each selling outlet
- b) the estimated total of each menu item; for each day of the following menu week.

The initial forecast itself would be based on the following factors:--

- i) Past Records (Sales Histories)
- ii) Advance Bookings
  - i) Current Events
  - ii) Current Trends
  - iii) Predicted Sales

### 8.4 FINAL FORECAST

The final and more accurate forecast usually takes place the day before the preparation and service of the particular meal. This takes into account the following :

- i) The previous day's food production and food sales figures. If the actual food sales figures are inline with the potential food sales figures no further action is necessary as the actual business is in line with the forecast volume of business. Should there be a difference it would be necessary to check where and why the difference has arisen. Your major concern should be to note the trend. If there were a trend of either decrease or increase in business this would need to be taken into consideration when producing the final forecast.
- ii) The weather conditions must be taken into account for the next day. As this forecast will be more accurate. A sudden change in the weather can effect the volume of business done. E.g. rain, snow, very hot. A change in weather will affect customers choice.

### 8.5 AIDS IN VOLUME FORECASTING

- 1) Sales Histories : A sales history is detailed record of or actual sales potential for a selling outlet. Its purpose is to provide an accurate record of food produced and sold compared with the forecast figures which can be used as a reference for forecasting future demand. It should held to note customer, preferences and any changes in trend.

- 2) Cyclic Menus : These are a series of fixed or semi-fixed menus which are repeated at a set period. The length of the period is usually related to the length of menu e.g 21 days for a menu of three main courses and 14 days for a menu of five main course.

## 8.6 STANDARD RECIPE

Standard recipe is the method of standardizing recipes in such a way so that there is tight control on cost and quantity. Standardization should not be allowed to strifle the individual chef's flair. A hotel can control quantities, quality and cost more easily. It is most useful to use standard recipe in a hotel where there are a number of chefs cooking the food. The standard recipe lays down all the ingredients, method of production and quantities used. It indicates the number of portions to be served. This will determine the size of portion or portion control. A section giving variation can be added to reduce the total number of recipes required.

The main advantage in using a standard recipe are :

- A well tried recipe ensure a consistently good finished product
- It controls portion size which is very important in costing a dish.
- It is easy to determine the food cost of a particular dish
- It simplifies the pricing of a particular dish
- It reduces the possibility of error.

### PROFORMA OF STANDARD RECIPE

ABC HOTELS LTD  
Standard Recipe

Recipe .....				
Ingredients	Quantities for			
	25	50	100	200
Method of Production			Comments	
Presentation of Service				
Variations			Variation of Ingredients and Method	

## 8.7 PORTION CONTROL

A customer will continue to patronize a restaurant provided he gets correct weight of the product he has paid for. On the other hand, the hotel's return must be right and the price charged must be correct for the quantities of goods sold. The quantity is the portion size which the hotel has used in its costing in calculating the selling price. The quantity sold for a given price must be consistently the same, The hotel should control this size to ensure that his costing are not invalidated.

Portion control means , the control of portion size to ensure that portion served are consistently of the same size s the portions coasted. The main objective of portion control are

- i) To ensure guest satisfaction
- ii) To serve fair portion of food/beverages for a fair price
- iii) To maintain profitability on all portions sold.

In the food and beverage units the controlling the size of each unit of sales requires the use of suitable equipment such as:--

- 1) Weighing Machines
- 2) Scales
- 3) Measuring jugs
- 4) Graded Size Scoops and Ladles
- 5) Standard Size Baking Tins
- 6) Standard Size Cups, Glasses, Soup Bowels
- 7) Bar Optics
- 8) Butter Pat Machines
- 9) Milk and Tea Dispensers
- 10) Slicing Machines
- 11) Standard Sizes Coupes
- 12) Standard Size cups
- 13) Standard Size Glasses
- 14) Standard Size Bowls
- 15) Standard Recipe Charts

## 8.8 CONVERTING RECIPE TO SERVING PORTIONS

Step 1 : Divide the required number of servings by the original number of recipe is for

$$\frac{\text{Required Number}}{\text{No of Recipe is for}} = P$$

Or

Step @ Multiply each ingredient by the resultant answer i.e.

$$\frac{\text{Required Number}}{\text{Number of Recipe For}} = P$$

Step 3 ? Times each ingredients = the required amount of each ingredient

Example



50 Portion Recipe  
 Rice (Raw) : 28 oz  
 Ham (Cooked): 8 lb  
 Cheese Sauce : 5 qt

Applying the formula we get :

Required Number  
 ----- = ?  
 Number of Recipe for

? times each ingredient  
 To change the recipe to 30 portions (round figures)

$$30 / 50 = 0.6$$

New Recipe	Serving 30 Portion
Rice (raw) = 0.6 x 28oz 1lb 1 oz	= 16.8 oz or 17 oz or
Ham (Cooked)= 0.6 x 8 lb	= 4.8 lb or 4lb 13 oz
Cheese Sauce = 0.6 x 5 qt	= 3.8 qt or 3 qt

## 8.9 STANDARD PORTION SIZES

The menu price of food items is based on the cost of the standard portion food required to prepare them. A standard portion size is the quantity of a particular food item that could be served to the guest. This quantity may be expressed in terms of weight or in numerical figures. The standard size of food item may be determined by the management in conjunction with the executive chef and restaurant manager. There may be two different standard portion sizes for the same commodity in a restaurant depending upon the type of menu –table d hote or an a la carte menu

Standard portion sizes are vital to control food costs and also it is a safe guard against customers dissatisfaction.

## 8.10 DETERMINANTS OF PORTION SIZES

Size of portion is to be decided according to the nature of establishment the type of customers, and type of food and beverage items handled by the establishments. In brief following points should be considered

1. The type of customers
2. The type of food and beverage operations
3. Spending power of the consumers

### **8.11 SUMMARY**

Production control means the controlling of the preparation of food which together should reduce over-production (and possible waste), loss from inefficient purchasing and processing, and loss from excessive portion sizes. The proper operation of the food control system should aid management in controlling food accosts efficiently and maximizing the profitability of the operation. There are four major stages in production control

- 1) Volume forecasting
- 2) Standard Yield
- 3) Standard Recipes
- 4) Standard Protion Sizes

### **8.12 SELF ASSESSMENT QUESTION**

1. Write a note on
  - Portion Control
  - Standard Recipe
  - Volume Forecasting
2. What factors must be taken into account when deciding on the size of portions be served?

### **8.13 REFERENCE BOOKS**

FOOD AND BEVERAGE COSTING : JAGMOHAN NEGI

**LESSON WRITER**  
**P. CHANDRA SHEKAR**

## LESSON 9

# COST BEHAVIOUR

### 9.0 Objective:

The objective of this lesson is to know about Fixed, Variable and Semi –Variable cost and its impact on unit cost

### CONTENTS:

- 9.1 Definition of Cost
- 9.2 Fixed cost and Variable Cost
- 9.3 Unit Cost

### 9.1 Definition of Cost

Accountants define a **cost** as a reduction in the value of an asset for the purpose of securing benefit or gain. That definition, although technically correct, is not very useful in a basic discussion of controls, so we will modify it somewhat.

As we use the term in our discussion of cost control in the food and Beverage business, *cost* is defined as the expense to a foodservice establishment for goods or services when the goods are consumed or the services are rendered. Foods and beverages are considered “consumed” when they have been used, wastefully or otherwise, and are no longer available for the Purposes for which they were acquired. Thus, the cost of a piece of meat is incurred when the piece is no longer available for the purpose for which it was purchased, because it has been cooked, served, or thrown away because it has spoiled, or even because it has been stolen. The cost of labor is incurred

When people are on duty, whether or not they are working and whether they are paid at the end of a shift or at some later date. The cost of any item may be expressed in a variety of units: weight, volume, or total value. The cost of meat, for example, can be expressed as a value per piece, per pound, or per individual portion. The cost of liquor can be expressed as a value per bottle, per drink, or per ounce. Labor costs can be expressed as value per hour (an hourly wage, for example) or value per week (a weekly salary). Costs can be viewed in several different ways, and it will be useful to identify some of them before proceeding.

### 9.2 Fixed and Variable Costs

The terms *fixed* and *variable* are used to distinguish between those costs that have no direct relationship to business volume and those that

#### Fixed Costs

**Fixed costs** are normally unaffected by changes in sales volume. They are said to have little direct relationship to the business volume because they do not change significantly when the number of sales increases or decreases.

Insurance premiums, real estate taxes, and depreciation on equipment are examples of fixed costs. Real estate taxes, after all, are set by governmental authorities and are based on a government 's need for a determined amount of total revenue. The real estate taxes for an

individual establishment are based on the appraised value of the assessed property as real estate. Real estate taxes do not change when the sales volume in an establishment changes. All fixed costs change over time, sometimes increasing and sometimes decreasing. However, changes in fixed costs are not normally related to short - term changes in business volume. They are sometimes tied indirectly to long - term volume changes. For example, an increase in the cost of insurance premiums may be attributable to an insurance company ' s perception of increased risk associated with higher volume. Even though the increase in insurance cost is somehow related to an increase in volume, the cost of insurance is still considered a fixed cost. Advertising expense is another example:

Larger establishments tend to spend more on advertising because their larger sales volume makes larger amounts of money available for the purpose, but advertising expense is still considered a fixed cost.

The term *fixed* should never be taken to mean static or unchanging, but merely to indicate that any changes that may occur in such costs are related only indirectly or distantly to changes in volume. Sometimes, in fact, changes in fixed costs are wholly unrelated to changes in volume, as with

real estate taxes. Other examples of costs that are generally considered fixed include repairs and maintenance, rent or occupancy costs, most utility costs, and the costs of professional services, such as accounting

### Variable Costs

**Variable costs** are clearly related to business volume. As business volume increases, variable costs will increase; as volume decreases, variable costs should decrease as well. The obvious examples of variable costs are food, beverages, and labor. However, there are significant differences between the behavior of food and beverage costs and the behavior of labor costs. Food and beverage costs are considered directly variable costs. **Directly variable costs** are directly linked to volume of business, so that every increase or decrease in volume brings a corresponding increase or decrease in cost. Every time a restaurant sells an order of steak, it incurs a cost for the meat. Similarly, each sale of a bottle of beer at the bar results in a cost for the beer. Total directly variable costs, then, increase or decrease — or at least *should* increase or decrease — in direct proportion to sales volume. Payroll costs (including salaries and wages and employee benefits, and often referred to as labor costs) present an interesting contrast. Foodservice employees may be divided into two categories — those whose numbers will remain constant despite normal fluctuations in business volume, and those whose numbers and consequent total costs should logically (and often will)

vary with normal changes in business volume. The first category includes such personnel as the manager, bookkeeper, chef, and cashier. In terms of the preceding definition, they are fixed - cost personnel. Their numbers and costs may change, but not because of short - term changes in business volume. The second category includes the servers, or the wait staff. As business volume changes, their numbers and total costs can be expected to increase or decrease accordingly. Both fixed - cost and variable - cost employees are included in one category on the statement of income: *salaries and wages* . Because payroll cost has both the fixed element and the variable element, it is known as a **semi variable cost** , meaning that a portion of it should change with short - term changes in business volume and another portion should not. It must be noted that each establishment must determine which employees should be fixed - cost personnel and which should be variable cost. In some specialized cases, it is possible for payroll to consist entirely of either fixed - cost or variable - cost personnel. For example, there are some restaurants in which the entire staff works for hourly wages. In these cases, numbers of hours worked and consequent costs are almost wholly related to business volume.

Conversely, in some smaller restaurants, employees may all be on regular salaries, in which case labor cost is considered fixed.

### 9.3 Unit Costs

It is also important to distinguish between **unit costs** and **total costs**. The units may be food or beverage portions, as in the cost of one steak or one martini, or units of work, as in the hourly rate for an employee. It is also useful to consider costs in terms of totals, as in the total cost of all food served in one period, such as a week or a month, or the total cost of labor for one period. The costs on a statement of income are all total costs, rather than unit costs. These concepts are best illustrated by example. In the Grandview Bistro, where steaks are cut from strip loins, a strip loin was purchased for \$98.25. If one entire strip were consumed in one day, the total cost would be \$98.25. However, the cost per unit (the steak) depends on the number of steaks cut from the strip. If there are 15, the unit cost is an average of \$6.55. No two of for a butcher to cut all steaks to exactly the same weight. In the food and beverage business, we commonly deal with average unit costs, rather than actual unit costs. It is important to know unit costs for purposes of establishing menu prices and determining unit profitability. Total costs, including those that appear in statements of income, are normally used for broader purposes, including determining the relationship between total costs and total sales — as discussed later in this chapter — and determining overall profitability of operations. It is important to note that, as business volume changes, total and unit costs are affected in different ways. Assume that a restaurant has a fixed cost for rent of \$2,000 per month. If 2,000 customers were served during a period of one month, the fixed cost of rent per customer would be \$1.00. If, in the succeeding month, the number of customers increased to 4,000, the total fixed cost for rent would not change, but the fixed cost per unit (customer) would be reduced from \$1.00 to \$0.50. A similar analysis may be done with variable costs. The variable cost for the steak described earlier is \$6.55 per unit. If 240 customers in a given month order steak, the total variable cost would be \$1,572, at \$6.55 average unit cost per steak. If, in the following month, 300 customers order steak, the variable cost per unit (the steak) should remain at \$6.55, whereas the total variable cost for 300 steaks increases to \$1,965. The preceding paragraphs illustrate cost behavior only as business volume increases, but it is important to recognize that costs behave similarly as business volume decreases. The relationships hold true. Figure 1.4 illustrates the behavior of fixed and variable costs per unit and in total. It is important to understand these relationships when dealing with cost/volume/profit analysis and the calculation of break - even points, which are discussed in

**Ref Book : Food and Beverage Management by Davis, Andrew and Sally Stone**

## LESSON 10

# COST REPORTING SYSTEM

### 10.0 Objective:

The objective of this lesson is to know about Fixed , Variable and Semi –Variable cost and its impact on unit cost

### CONTENTS

- 10.1 Definition of Cost
- 10.2 Daily reports
- 10.3 Monthly Report
- 10.4 Weekly Report
- 10.5 Summary
- 10.6 Self Assessment Questions
- 10.7 Reference Books

### 10.1 INTRODUCTION

The main object o of Cost reporting system is to develop an overall profit budget for the entire hotel. Therefore separate reports will be prepared in the kitchen

They are

- 1) Daily Report
- 2) Monthly Report
- 3) Weekly Report

The information contained in these reports is used to prepare the managers to take decisions with regarding to menu and profitability of the department and for volume forecasting and Indenting and Purchasing of material and also will help in controlling the overall all operations of the hotel as whole.

### 10.2 DAILY REPORTS:

The major portion of the necessary records for any system of food cost accounting is prepared by the employees rather than the food cost controller. The sources of data used by the food cost controller are:

#### DATA

Purchase orders  
Market quotation sheets.  
Daily Food receiving sheet  
Food invoices  
Stores requisitions  
Record of sales.

#### SOURCE

Purchasing agent.  
Purchasing agent.  
Receiving clerk.  
Receiving clerk.  
Stores clerk.  
Accounting department.

From the foregoing data, the food cost controller is able to prepare the DAILY FOOD COST REPORT. A proforma is given below:

<u>DAILY FOOD COST REPORT.</u>				
DATE: _____			DAY: _____	
EXPLANATION	TODAY	TO DATE		
		THIS MONTH	LAST MONTH	LAST YEAR
<u>SALES:</u> Dining room Banquets.				
TOTAL SALES				
<u>COST OF FOOD.</u> Direct issue. Store issue.				
TOTAL ISSUE				
LESS STAFF MEALS				
COST OF FOOD SOLD				
FOOD COST %				
COST PER RUPEE VALUE.				

It is advisable that the foregoing simplified form of daily food cost report be in the hands of the management by noon of the following day.

### 10.3 MONTHLY REPORTS:

Monthly reports are compiled for the guidance of the management. Hence, they should be as condensed as possible and also comprehensive as the management desires. Most of the information presented in the monthly report should afford a comparison of the current month with the prior month and also same month last year.

<u>MONTHLY FOOD REPORT</u>			
PREPARED ON: _____		FOR THE MONTH OF: _____	
EXPLANATION	CURRENT MONTH	PRIOR MONTH	SAME MONTH LAST YEAR
<u>SALES.</u> Dining room Banquets.			
TOTAL SALES.			

<b><u>COST OF FOOD:</u></b> Direct issues Store issues TOTAL ISSUES Staff meals			
FOOD COST			
% FOOD COST			

#### 10.4 WEEKLY FOOD COST REPORT:

For a weekly food cost report, the following proforma can be used

<b><u>WEEKLY FOOD COST REPORT</u></b>			
EXPLANATION	%	CURRENT WEEK	PREVIOUS WEEK
OPENING STOCK PURCHASES LESS: CLOSING STOCK COST OF MEALS <b>ACTUAL FOOD COST</b>			
SALES LESS: G.P			
STD. FOOD COST FOOD COST VARIANCE			

#### 10.5 Summary

The main object o of Cost reporting system is to develop an overall profit budget for the entire hotel. Therefore separate reports will be prepared in the kitchen

They are

1. Daily Report
2. Monthly Report
3. Weekly Report

The information contained in these reports is used to prepare the managers to take decisions with regarding to menu and profitability of the department and for volume forecasting and Indenting and Purchasing of material and also will help in controlling the overall all operations of the hotel as whole.



**10.6 SELF ASSESSMENT QUESTIONS**

1. What is cost reporting and Explain the Daily Monthly and Weekly Reports and its use in decision making

**10.7 Reference Book**

Food and Beverage costing : Jagmohan Negi

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**FOOD COSTING  
DIPLOMA IN FOOD PRODUCTION PAPER II**

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