

Food and Beverage Cost Control

FRM 134

Module 1

INTRODUCTION TO FOOD AND BEVERAGE CONTROL

After reading this module, students should be able to;

- List and define the terms related to food & beverage cost control.
- Explain on the significance of control and cost control in the food industry.
- Identify who is the person responsibility to control and what is needed to control.
 - Explain various types of cost in the food service operation.

Introduction

Definition of control:

- Control is a process by means which managers attempt to direct, regulate and restrain the actions of people in order to achieve desired goals.
- An obvious first step is to established goals for the enterprise. Probably the most common goal for all private enterprise is financial success, although this is by no means the only- range goal of business.
- Others might relate to preserving the environment, promoting better health among the population or etc.
- To achieve the goals, management must setup any number of sub goals compatible with its long-range plans. These tend to be more specific and usually more immediate in nature.
- For example, to achieve the goal of preserving the environment, it would be necessary to make rather immediate plans to process or dispose of waste materials in appropriate ways.



Responsibility:

- The total responsibility for the operation of any food and beverage enterprise rest ultimately with management.
- A number of factors, including nature and scope of operations, will determine the extent to which the management exercise directs control as opposed to delegating responsibility to a subordinate.
- In general, the large the operation, the more likely it is that one or more subordinates will supervise and direct control procedures.
- The authors will assume the existence of both a food controller and a beverage controller each of who will be responsible for the supervision of all procedures in that single area.
- By the same token, we will assume that the manager will personally retain direct control over labor cost.

What is Need to Control?

- The food and beverage business can be characterized as one that involves raw materials purchased, received, stored and issued for the purpose of manufacturing products for sale.
- In these aspects many similarities exist between the hospitality industry to achieve the goal of profitable operation.
- This will entail a discussion of how costs and sales are controlled in food and beverage operations.
- The means employed by foodservice managers to directly, regulate and restrain the actions of people, both directly and indirectly, in order to keep costs within acceptable bounds, to account for revenues properly, and make profits.

Definition of cost control:

- The process whereby manager attempt to regulate costs and guard against excessive costs in known as cost control.
- It is on going process and involves every step in the chain of purchasing, receiving, storing, issuing and preparing food and beverages for sale, as well as scheduling the personnel involved.
- Exact methods for cost control will vary from place to place, depending in part on the nature and scope of operation; but the principle behind varying methods will be constant.
- The obvious governing power over costs in all areas in order to keep costs within acceptable bounds, to account for revenues properly, and make profits.

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- Two of the principal causes of excessive costs are inefficiency and waste.
 - For example storing food in refrigerators that are not cold enough, or liquor in bottles that are not tightly closed, will lead to spoilage and hence to excessive cost. So will the preparation of an inedible beef stew or an undrinkable martini. When the stew is thrown into the garbage can or the martini poured down the drain, costs of operation are increased but sale are not.
 - Since profit is essentially the difference between sales and costs, it is apparent that any increase in costs that does not lead to corresponding increases in sales can only have the effect of reducing profits.
 - Clearly, management must take steps to guard against the occurrence of these excessive costs.

Sales control:

- While cost control is critically important to the profitable operation of any business, it alone will not ensure profitability. Additional steps must be taken to ensure that all sales in appropriate income to the business.

Industry Wide Variations in Cost

- Cost percents vary considerably from one foodservice operation to another.
- Some factors contributing to these variations would be type of service, location, and type of menu.
- Fast food – those that operate at a low margin of profit per item served and depend on relatively high business volume.
- Fine dining – those operations that operate at a relatively high margin of profit and therefore do not require such high business volume.

Types of Cost

There are various types of cost which are:

- **Actual Cost**

The actual cost is what a cost or expenses actually was. For example, the payroll records and check made out to employees will indicate the actual labor cost for that payroll period.

- **Budgeted Cost**

A budgeted cost is what a cost expected to be for a period time. For example, for an anticipated level of sales for a month, we might budget or forecast what the labor cost should be for that period. Later, that budgeted cost would be compared with the actual labor cost in order to determine the causes of any differences.

- **Controllable Cost**

Are costs that can be changed in the short term. Direct costs are generally more easily controllable than indirect costs. Variable costs are normally controllable. Certain fixed costs are controllable, including advertising, promotions, utilities, repairs, etc.

- **Non-Controllable Cost**

Are those costs that cannot be changed in the short term. These are usually fixed costs. These typically include items such rent, depreciation, and taxes.



- **Fixed Cost**

Are those that are normally unaffected by changes in sales volume. The term fixed should never be taken to mean unchanging, merely to indicate that any changes that may occur in such costs are related only indirectly to changes in sales volume. Examples: Rent, Utilities, Insurance Premiums

- **Variable Cost**

A variable cost is one that varies on a linear basis with revenue. Are those that are clearly related to business volume. Directly variable costs are those that are directly linked to volume of business, such that every increase or decrease in volume brings a corresponding increase or decrease in cost. The obvious variable costs are food and beverage. The more foods and beverage sold, the more that have to be purchased. If revenue is zero, then the cost should also be zero. As business volume increases, so do these costs. As business volume decreases, so do these costs.



- **Direct Cost**

Direct cost is a cost that is the responsibility of a particular department or department manager. Most direct costs will go up or down, to a greater or lesser degree, as revenue goes up and down. Because of this, they are considered to be controllable by, and thus the responsibility of, the department to which they are charged. Examples of this type of cost would be food, beverages, wages, operating supplies and services beverages and linen and laundry.

- **Indirect Cost**

An indirect cost is commonly referred to as an undistributed cost or one that cannot easily be identified with a particular department or area, and thus cannot be charge to any specific department. For example, property operation, maintenance and energy cost could only be charged to various departments (such as linen or food and beverage) with difficulty. Even if this difficulty could be overcome, it must still be recognized that indirect costs cannot normally be made the responsibility of an operating department manager. Indirect costs are also sometimes referred to as overhead cost.



- **Joint Cost**

Is a cost shared by and the responsibility of two or more department or area. The cost of dining room waiter who serves both food and beverage is an example. His labor is a joint cost and should be charged to the food department and to the beverage department. Most indirect costs are also joint costs.

- **Sunk Cost**

A cost that has been incurred and cannot be reversed. Also referred to as "stranded cost." A worn-out piece of equipment bought several years ago is a sunk cost because the cost of buying it cannot be reversed.

- **Opportunity Cost**

The cost of not doing something or the profit lost. An organization can invest its surplus cash in marketable securities at 10 percent, or leave the money in the bank at 6 percent. If it buys marketable securities, its opportunity cost is 6 percent. Another way to look at it is to say that it is making 10 percent on the investment, less the opportunity cost of 6 percent, therefore the net gain is 4 percent.

Standard Cost

A standard cost is what the cost should be for a given volume or level of revenue. For example, a standard cost can be developed by costing the recipe for a given menu item. If ten of these menu items are sold, the total standard cost should be ten times the individual recipe cost. Another illustration would be personnel cost (wages) for cleaning at dining area. If the area attendant is paid RM4.00 an hour, and it takes one half hour to clean the area, the standard labor cost for cleaning the area would be RM2.00. While, if the service person takes 7 hours to clean the area, total standard cost would be RM28.

- **Prime Costs**

Is a term used in the food and beverage industry to refer to the cost of materials and labor.

$$\text{Prime Cost} = \text{Food Cost} + \text{Beverage Cost} + \text{Labor Cost}$$

- **Historical Costs and Planned Costs**

Historical costs are figures that have already happened and can be found in the business records.

Planned costs are made by using historical costs in the present to determine what is likely to happen in a future period to come. These numbers are also used in budgeting.

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Module 2

BUDGETARY CONTROL

Objectives:

- Describe the three purposes of budgeting.
 - Define some of the types of budgets.
- Briefly discuss some of the advantages and disadvantages of budgeting.
 - List and briefly discuss each of the five steps in the budget cycle.
 - Briefly discuss on budgeting problem.

What is Budgeting?

- Budgeting is part of the planning process. It can involve decisions concerning day-to-day management of an operation or, on the other hand, involve plans for as far ahead five years.
- Budgeting is used by most firms to aid in controlling costs and to ensure that costs are kept in line with forecast revenues.
- In order to make meaningful decisions about the future, a manager must look ahead. One way to look ahead is to prepare budgets or forecasts.
- A forecast may be very simple. For a restaurant owner/ operator, a budget may be no more than looking a head to tomorrow, estimating how many customers will eat in the restaurant, and purchasing food and supplies to accommodate this need.

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- On the other hand, in a larger organization, a budget may entail forecasts up to five years ahead (such as for furniture and equipment purchases) as well as day to day budgets (such as staff scheduling).
 - Budgets are not always expressed in monetary terms. They could involve numbers of customers to be served, number of rooms to be occupied, number of employees required or some other unit rather than money.
 - The main purpose of budgeting could be summarized as follows:
 - i. To provide organized estimates of future revenues and expenses, manpower requirements or equipment needs with estimate broken down by time period and / or department.
 - ii. To provide a coordinated management policy both short and long term, expressed primarily in accounting terms.
 - iii. To provide a method of control by comparing actual results with budgeted plans, and to take corrective action if necessary.

When are Budgets Prepared?

- **Long range budgets** for up to five years forward are generally prepared annually. Each year, such budgets are revised for the next period (up to five years) forward.
- **Short range budgets** are prepared annually for the most part, with monthly projections. Each month, budgets for the remaining months of the year should be revised to adjust for any changed circumstances. Department managers should be involved in such revisions, as well as the budget committee for overall coordination.
- **Weekly or daily short range budgets** are usually handled internally by the department heads or other supervisory staff. For example, the housekeeper would arrange the room attendant staffing schedule (which affect the payroll budget) on a daily basis based on the anticipated room occupancy day by day.

Types of Budget

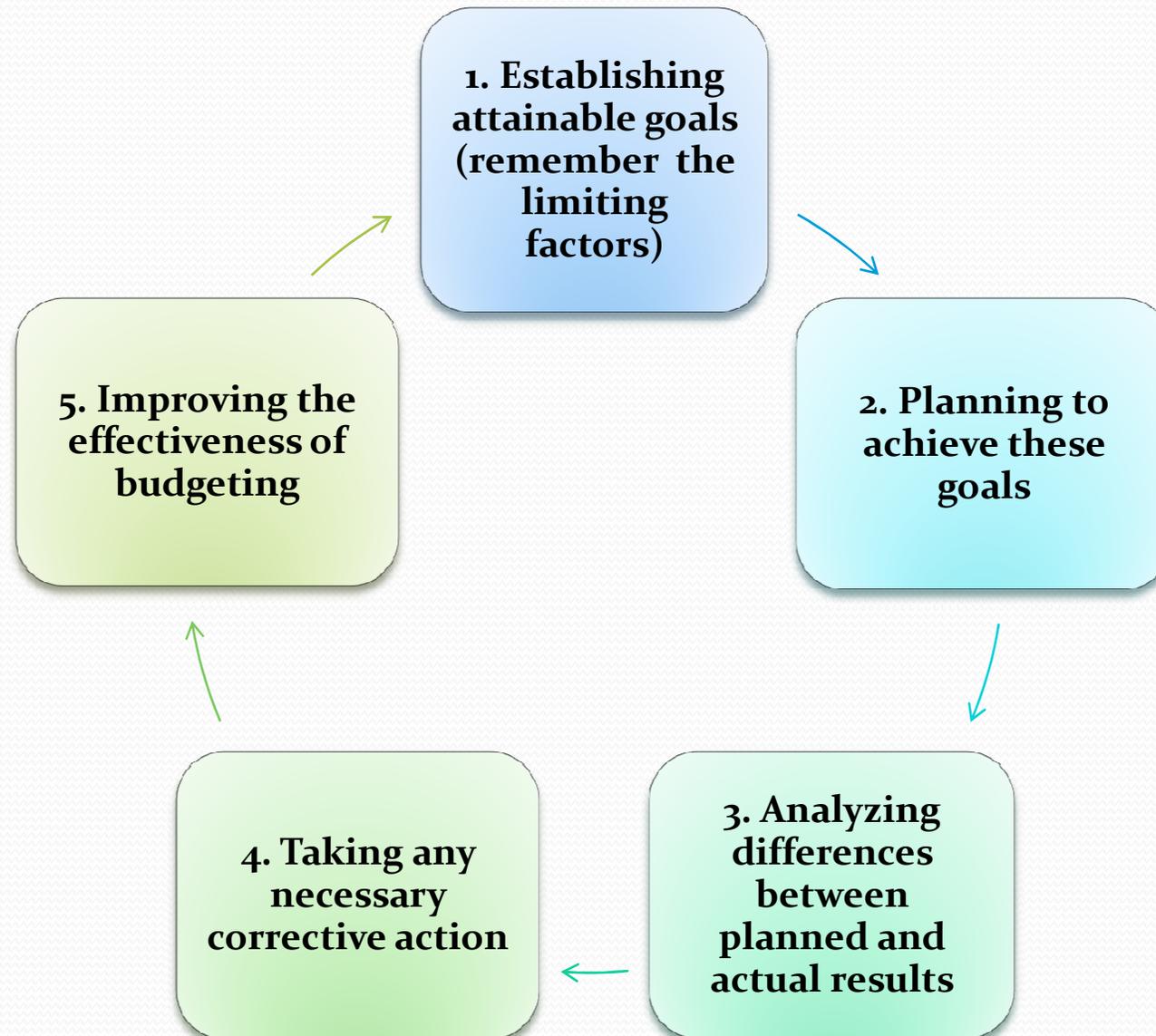
- There are various types of budgets such as short term or long term, capital, operating, departmental, master and fixed or flexible.
- In a small operation, budgets can be prepared by an individual. While in the large operation, there would normally be a budget committee.
- In all cases, whether for a day, a year or some other time period, budgets should be prepared in advance at the start of the period.

Advantages and Disadvantages of Budgeting

- Some of the advantages of budgets are:
 - i. They involve participation of employees in the planning process, thus improving **motivation and communication**.
 - ii. They necessitate, in budget preparation, consideration of **alternative courses of action**.
 - iii. They allow a goal, a standard of performance, to be established with subsequent **comparison of actual result with that standard**.
 - iv. Flexible budgets **permit quick adaptation to unforeseen, changed conditions**.
 - v. They require those involved to be **forward looking**, rather than to be looking only at past events.

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- Some of the disadvantages of budgets are:
 - i. Time constraints
 - ii. Unpredictable future
 - iii. Confidential matters
 - iv. Spending to budget problem

The Budgeting Cycle has Five Parts



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Module 3

PURCHASING AND INVENTORY COST CONTROL

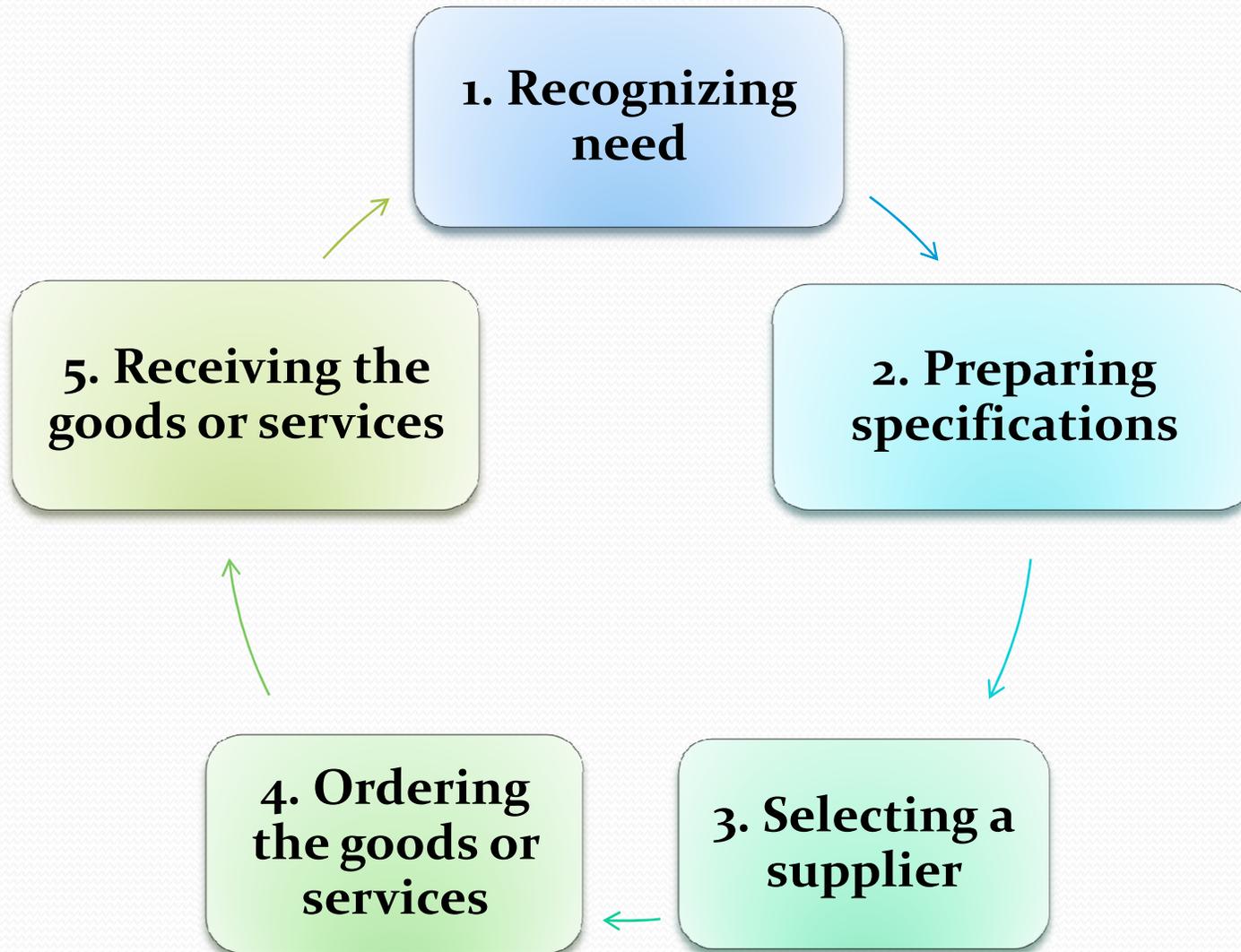
Objectives:

- List and briefly discuss the five major steps in the purchasing cycle.
- Explain how perpetual inventory cards and requisitions are used.
- Use the three costing method (most recent price, first in/ first out and weighted average) for valuing inventory and costing requisitions .
- Solve problems concerning purchase discounts and differentiate between a rebate and a discount.
 - Use the economic order equation to aid in quantity ordering.

3.1 The Purchasing Department

- The purchasing department's role is to make sure that supplies, equipment and services are available to the operation in quantities appropriate to predetermined standards, at the right price and at a minimum cost to meet desired standards.
- Generally, those responsible for purchasing have the authority to commit the establishment's funds to buying required goods or services.
- By following established purchasing procedures, an operation can avoid many purchasing pitfall such as panic buying, over or short purchasing, buying by price rather than by a combination of quality and price, pressure buying or what is probably quite common, satisfied buying.

3.2 Purchasing Cycle



3.3 Ordering Goods

- The ordering procedure should be similarly formalized with the use of purchase orders.
- Three copies of the purchase order are required:
 - i. For the supplier,
 - ii. For the person responsible for receiving ,
 - iii. For the accounting office, to be attached to the invoice when it is received for payment.
- One question that does arise in the ordering process is the quantity to order. This is often left to the discretion of the department head involved, either because he has authority to order directly what is needed, or because he is in the best position to advise the purchasing department of required quantities. The quantity required is not too difficult to determine from past experience.

3.4 Purchase and Payments

Standing Orders

- One type of standing order would be that a supplier deliver, at an agreed price, a fixed quantity of a specific item each day.
- Another type of standing order requires the supplier each day to replenish the stock of a of a certain item up to a predetermined or par level. The par stock level would be established for each item handled this way, according to the needs of the establishment.
- E.g.: Par Stock Form

Item	Par Stock	On hand	Required
Apples, cooking	4	6	10
Apples, baking			
Apples, crab			
Apples, table			
Apricots			
Bananas			

In summary, specifications should include the following items:

- The name or description of the item required
- The specific quantity required
- The frequency with which the item is required
- Where it is important, the size, weight, amount or number of the items required.
- Where it is important, the form that the items should take (for example, whether an item of food should be fresh, frozen or canned)

Eg:

Prime rib

Bone in

Oven ready

Grade :

USDA choice

Upper half

Weight range:

18lb min – 22lb max

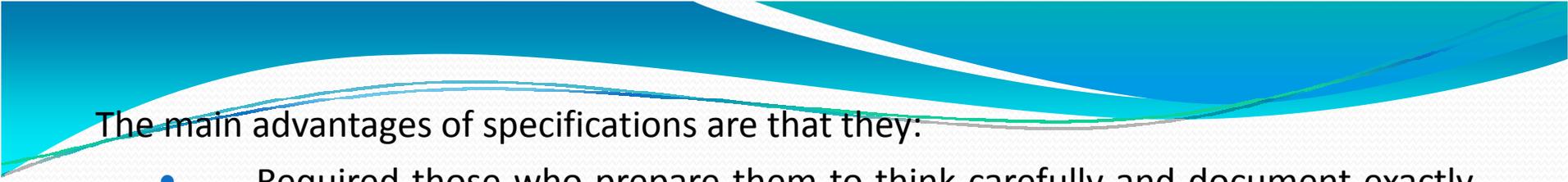
Average 20 lb (9kg)

State of refrigeration: Chilled when delivered not previously frozen

Fat limitation: 0.25 – 0.75 inch (average 0.5) on Outside moderate marbling

Color: Light red to slightly dark

Quantity requirement: approximately 300 lb per week



The main advantages of specifications are that they:

- Required those who prepare them to think carefully and document exactly what their product requirements are
- Leave no doubt in suppliers' minds about what they are quoting on thus reducing or eliminating misunderstanding between supplier and establishment
- Eliminate, for frequently purchased items, the time that over the telephone or directly to sales persons each time the product is needed
- Permit competitive bidding
- Allow the person responsible for receiving to check the quantity of delivered goods against a written description of the quality desired

Payments

- Purchase Discounts

- Whenever a purchase discount is offered, the advantage of taking the discount must be considered. For example: suppose on a \$ 1000 purchase the terms are 2/100 net 50. On a \$ 1000 purchase paid within fifty days, this would save \$20. This may not seem a lot of money, but multiplied many times over on all similar purchases made during a year, it could amount to a large sum. However, in the example cited, the company may have to borrow the money (\$980) in order to make the payment within ten days. Let us assume the money were borrowed for fifty days (sixty days less than ten days) at an 8 percent interest rate.
- The interest expense on this borrowed money would be:

$$\frac{\$980 \times 50 \text{ days} \times 8\%}{365 \text{ days}} = \$10.74$$

- In this case, it would be advantageous to borrow the money, since the difference between the discount saving of \$20.00 and the interest expense of \$10.74 is \$9.26

Perpetual Inventory Cards

- For item carried in storerooms that are under the control of an authorized persons, a system of perpetual inventory cards is recommended.
- A separate set of individual perpetual inventory cards should be maintained for each separate storage location.
- For example: the housekeeper would have a set of cards for linens and other supplies required in the rooms department, and the steward would have a set of cards for the items he has under lock and key in the food storeroom.
- E.g.: Perpetual Inventory Cards for a Single Item

Item		Supplier		Tel:
Minimum		Minimum		Tel:
Maximum		Supplier		Tel:
Date	In	Out	Balance	Requisition Cost Information

3.5 Economic Order Quantity

- There are costs involved in carrying an inventory of supplies of any kind. These costs include the cost of money that is either borrowed to carry the inventory or that is tied up by the firm and thus not available for the purpose. There are also costs associated with having to store the inventory, such as the necessity to include storage areas in the building (thus increasing the building costs), inventory insurance, labor costs (storekeepers and other personnel) and the cost of control forms (for example, perpetual inventory cards and requisitions). These costs could generally vary from 10 to 30 percent of the value of the inventory.
- The economic order quantity equation can be used, where appropriate to minimize the costs associated with purchasing and carrying inventories. The equation is:

Where EOQ = Economic order quantity $EOQ = \sqrt{\frac{2FS}{CP}}$

F = Fixed cost of placing an order

S = Annual sales or usage in units

C = Carrying costs (insurance, interest, storage) as Percent of the dollar amount of the inventory

P = Purchase price per unit

E.g.:

- Let us assume the head office purchases case-lots of hamburger bags for all its drive-in restaurants in the city. Normal sales of hamburgers would require 1000 cases of bags per year. Carrying cost of the inventory is 15 percent of inventory value. The purchase cost per case or unit is \$ 12.00 and the fixed cost of placing an order is \$ 8.00. Substituting these values in the equation, we obtain:

$$\begin{aligned} EOQ &= \sqrt{\frac{2 (\$8.00) (1000)}{(15\%) (\$12.00)}} \\ &= \sqrt{\frac{(\$16000)}{(\$1.80)}} \\ &= \sqrt{8888} \\ &= 94 \text{ cases (to the nearest whole number)} \end{aligned}$$

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Module 4

FOOD PURCHASING, RECEIVING AND INVENTORY CONTROL

Objectives:

After studying this chapter, the reader should be able to do the following:

- Describe the departmental objectives of purchasing and receiving.
 - Describe the three purchasing procedures.
- Discuss the reasons for preparing standard specifications.
 - List and briefly discuss the receiving process.
 - Describe the types of receiving.
 - Discuss on the form involved in process of receiving.
 - Describe the receiving pitfalls.
- Define the term storage and discuss the types of storage.

4.0 Food Purchasing

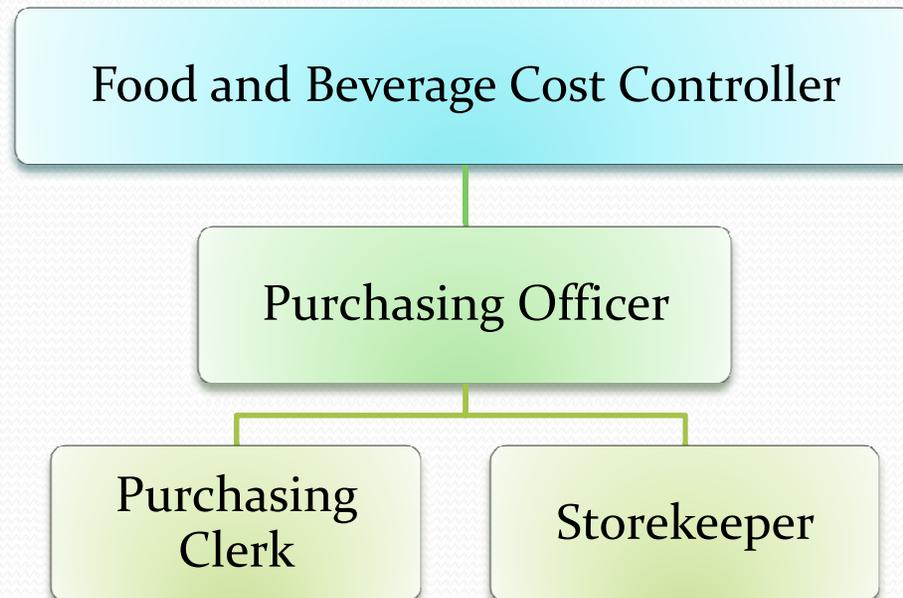
Departmental Objectives :

- The main objective of the department is to purchase goods at the right quality, quantity at the lowest price possible and to be delivered to the right place at the right time.

Personnel requirements :

- One person is needed to be solely in charge of the purchasing activities and a second person is also required to do the clerical work and other 'extra' duties.

Organizational Chart



Defined standards and product

- The standards must be worked out with the kitchen personnel's, other department heads and the top management in order to come up with the standard specifications for the items to be purchased.

Standard operational procedures for all task in the department

- There are 3 purchasing procedures to receive all purchasing requisition from the various ordering department;-

a. Purchase Request

- To be used by all other than the kitchen and the store.
- This method of purchasing requires sometimes for processing.
- Therefore any request should be sent to the purchasing office, anywhere between 1 month and 3 weeks before the expected delivery date.
- For repeat orders, you still have to call up the suppliers to double check on the price.
- Normally, you would select the one that has supplied you before and the one with the lowest price yet at the same time it also meets the required standards set.



b. Grocery Order

- This will be used for the request of non perishable items.
- Request made should allow 1 - 2 weeks delivery time.
- Suppliers would be called upon to give their quotations.
- Record their quotations according to the items.

c. Daily Market List

- To be used by the kitchen (perishable items).
- Suppliers would be called upon to give their quotations.
- Items will be further listed either under store purchases or direct market.
- Specifications for these item is very important.
- In this manner it will ensure quality of products and service and suppliers may change after 1 month.



The reasons for preparing standard specifications are as follows;

- i. To establish a buying standard for a particular commodity for an establishment.
- ii. To inform the supplier, in writing, precisely what the purchaser requires.
- iii. To establish a common denominator between the purchasing officer and the approved suppliers for settling the price of a commodity.
- iv. To inform the receiving clerks and the store-man what to accept.
- v. To obtain a standard product for the production and selling departments can be more accurate.



4.1 Receiving

Definition

- Receiving defined as an activity for ensuring that products delivered by suppliers are those were ordered in the purchasing activity.

Departmental Objectives

- The objective of this department is to receive only goods that are ordered according to the specification. Anything that does not meet the standards must be rejected.



Receiving Practices

Receiving practices may vary with different food service companies, but the following general principles governing the process are standard.

- i. Check incoming product against the purchase order or in-house purchase record.
- ii. Check incoming product against specifications. Necessary to check product temperature, weight, grade and refrigeration state (whether the product has been thawed and frozen).
- iii. Check the delivery invoice. After product quality and quantity is verified , the invoice can be signed.
- iv. The invoice becomes a source document required for further processing of bills.
- v. Check to see that products are promptly moved to proper storage areas.

4.1.1 Receiving Process

Inspection against the Purchase Order



Inspection against the Invoice



Acceptance or Rejection of Order



Completion of Receiving Record



Removal to Storage

4.1.2 Types of Receiving

There are 2 types of receiving which are:-

i. Invoice receiving

- A paper that list shipping information.
- It has its own number and gives the name of the company, quantity, quality, price, total price per type item shipped and total for the invoice.
- Other information may be on the invoice. The invoice verifies the order.
- The quantity, quality of the products delivered should be checked against the purchase order or other receiving documents.

ii. Blind check receiving

- The method involved giving the clerk a blank invoice/purchase order listing the incoming merchandise but omitting the quantity, quality, weights and prices.
- The receiving clerk must insert these numbers into the order on the basis of a check of the delivery.
- This invoice is checked against the one from the receiving clerk and the figures in both are verified.

4.1.3 Forms, Records and Equipments

Three forms most commonly used for recording incoming deliveries are;-

i. Receiving clerk's daily report

- The list of the merchandise received in a form suitable for checking against the supplier's invoice.

- The daily report should list the following items:
 - a. Date of delivery.
 - b. Invoice/purchase order number.
 - c. Supplier.
 - d. Number of units.
 - e. Quantity received.
 - f. Unit price.
 - g. Total amount extension.
 - h. Distribution of the delivery.



ii. **Substitution invoice**

- Used when merchandise arrives without an invoice.
- Practically the same information as the receiving record.
- The supplier's invoice reaches the accounting office, the substitution invoice is compared with it as a basis for verifying and approving the delivery.

iii. **Request for credit memorandum**

- Usually made in triplicate, list discrepancies such as shortages in quantity or failure of the quality to conform to specification.
- The original is sent to the supplier with the signed delivery invoice.
- The receiving clerk retains a copy and another is sent to the accounting office.

Purchase invoice stamp

- A purchase invoice stamp is used on all incoming invoices.
- This invoice usually goes to purchasing for approval of prices and other factors and it is then sent to accounting, where the invoice is compared with the receiving clerk's daily report.

Equipment

- Since weighting of food is of prime importance, a set of accurate scales is essential, for the correct recording of weight. The type of scale used will vary according to the size of the food service establishment. Floor level scales are recommended for heavy ingredients other types are:
 - i. Automatic indicating scale.
 - ii. Recording scale.
 - iii. Inspection table - for checking and sorting of merchandise.
 - iv. Container - opening tools example crow bar, hammer, short bladed sharp knife.
 - v. Transportation tools - carts, hand truck may be used to reduced stresses and strains.
 - vi. Hose - for cleaning.

4.1.4 Receiving Pitfalls

There are many ways in which an unscrupulous person can successfully defraud an operation. Here are some of the tricks,

- i. Packing merchandise in excessive moisture or wrapping in ice to make weighting more difficult and add more weight.
- ii. Placing satisfactory merchandise on the top level that is visible, but inserting merchandise of in-proper quality underneath.
- iii. Repairing produce and putting a lighter in the new crate while keeping the price the same as for the heavier original crates (it is wise to spot check the weight of crates and cartons).
- iv. Sending incomplete shipments with the full bill and neglecting to send the remainder.
- v. Supplying short weights.

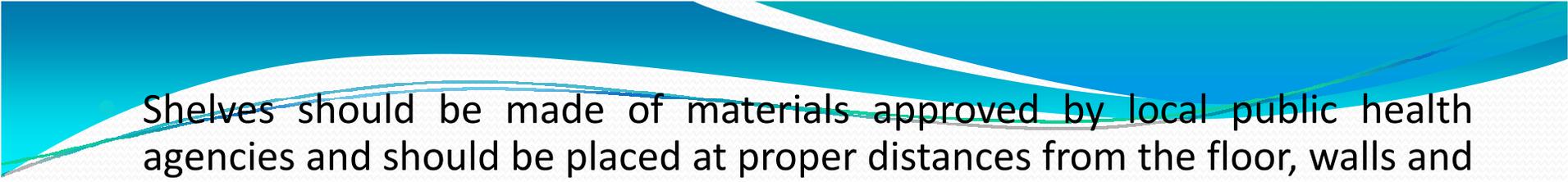
4.2 Storing

- Storage defined as holding of goods under proper conditions to ensure quality until time of use. For example, using the FIFO system-time consuming.
- Foodservice operations store raw or cooked ingredients in storage areas before production or service.
- The food items stored can present a great deal of money, it is imperative to see that all items purchased are properly stored and are issued in a definite sequence.
- Loss or waste of food or non-food items may occur due improper storage, theft, insect infestation and non-accessibility.
- It is advisable to set limits on the number of persons who have access to storage areas.

- The fewer people that go in and out of the storage areas, the more secure and efficient the foodservice operation will be.
- Storage areas should have easy access from the receiving area and from the preparation and production areas. Storage areas should be clean and neatly arranged.
- They should have capability to store all goods ordered, conversely, quantities ordered should be based on the amount of storage space available.
- The temperatures and humidity in storage areas have to be controlled and should be kept at the optimum level so that losses are prevented.

Dry storage

- Should be adequately ventilated, clean with sufficient air circulation and the desired humidity.



Shelves should be made of materials approved by local public health agencies and should be placed at proper distances from the floor, walls and ceilings.

- The arrangement of the items on the shelves should be well organized to facilitate air circulation.
- Foods normally stored in dry storage areas include canned goods, flour, sugar, shortening, spices, cereals, certain fruits like bananas and certain vegetables like onions and potatoes.
- Due to lack of space, many operations locate dry storage areas in the basement or utility room of the operation or in areas close to heating, cooling or ventilation equipment.
- Proper utilization of space is also necessary. Any space lost due to improper utilization may be costly and may cause recurring problems since the quality of food will be affected.

Proper labeling of the shelves helps in organizing as well as in proper storage.

- Temperatures in dry storage areas should range from 5° C to 24°C. Some perishable foods, such as potatoes and onions, should be stored at slightly lower temperatures (4.5°C to 13°C) to prevent spoilage.
- Circulation of air is necessary to maintain freshness of the perishable goods. Air circulation also helps in the elimination of odors and the removal of moisture.
- Sufficient space should be allowed in the storage areas for free movement of carts, pallets and motorized lifts, particularly in the centers of all aisles.
- Storage areas should be kept clean and a regular cleaning schedule followed. Spills, leakage or breakage should be cleaned promptly.
- To facilitate cleaning, large storage containers should have wheels.

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Module 5

LABOR COST

Objectives:

- Define and describe staffing and scheduling of labor.
- Define and describe the solution full time employees problem.
 - Define and briefly describe the types of schedules.
- Learn what are the other factors that influence labor cost.

5.1 Staffing and Scheduling

The term *staffing* and *scheduling* are sometimes used interchangeably; in fact, they refer to separate but interrelated functions.

Staffing

- Concerns the determination of the appropriate number of employees needed by the operation for the work that must be accomplished.
- Job analyses and work production standards provide the basis for determining staffing needs.

Scheduling

- Having the correct number of workers on duty, as determined by staffing needs.
- Scheduling involves assignments of employees to specific working hours and workdays.

Variables

- Staffing and scheduling depend on many factors. Operational differences, such as which meals are served or where the foodservice operation is located, have a great effect on the number of employees and the time they will work.



Operational Differences

In foodservice operations, staffing and scheduling can become extremely complex because of highly variable nature of the business. For example,

- I. In a commercial foodservice, the weekend dinner meal is often a peak time.
- II. An operation serving primarily a lunch crowd in a business area, however may have very low volume in the evening.
- III. In a university residence hall foodservice, a school lunchroom, and some other foodservice operation, customer participation is much more predictable.

Scheduling is further complicated by absenteeism, labor, turnover, vacation and holiday, day off and different skill of employees.

5.2 Relief Employees

Scheduling only full time employees to do all the work could create some problems. During rush hours, customers would complain that the operation is understaffed but during slack times the employees are sitting around with nothing to do. A solution for these is :-

I. **Part-time employees**

- In some foodservice operations, most of the staff are part-time employees, a practice particularly prevalent in quick-service restaurant.
- Part-time employees quite often are not eligible for many benefit programs, such as vacation and sick leave time, holidays or insurance.
- In some organizations, part-time employees receive these benefits when hours of employment reach a specified level.
- Benefits such as vacation and sick leave time may be prorated according to the number of hours worked.



II. Split shift scheduling

- In which employees are scheduled to work during peak hours only, is another way in which foodservice managers attempt to have adequate staffing when they need it and minimal staffing during between-meal, low volume times.
- Dining room hostesses, waiters and other service personnel are frequently scheduled to work during the noon meal, take a break during the after noon when the dining room may be closed, and return for the evening meal.

Issues in employee scheduling

- Some unusual problems occur in scheduling for a foodservice operation. The hours between breakfast and dinner in a three meal-a-day operation do not lend themselves to two full shifts. The manager needs to determine the type of work schedule that would be best for the operation. Overtime increases labor costs and should be carefully investigated before approval.

5.3 Types of Schedules

Three types of work schedules, master and production must be made by the foodservice manager. The master schedules shows *days on* and *off* duty and vacations. The shift schedule will indicate the position and hours worked and may indicate the number of days worked per week; it also lists relief assignments for positions when regular workers are off.

I. **Master schedule**

- In most foodservice facilities, a master schedule which includes days off, serves as an overall plan for employee scheduling.
- Generally, some type of rotation is used for scheduling days off, especially in 6 or 7 day a week operations, permitting employees to have some weekend time off on a periodic basis.
- A policy of every other weekend or every third weekend off is not uncommon. The master schedule provides the basis for developing the weekly, biweekly or monthly schedule.



II. Shift schedule

- The shift schedule shows the staffing pattern of the operation.
- For the most part, this rigid shift scheduling is not the most effective approach to scheduling in foodservice operations.
- In the example, all six dishwashers come on duty at 7.00 am and soiled dishes in any quantity may not come into the dish room until 7.30 or 7.45 am.
- One or two of the workers may be required to fill the dishwasher and prepare it for use for the breakfast dishes; the other workers would probably have time that would be difficult to use efficiently in some other way.

III. Staggered schedule

- Which provides for employees to begin work at varying times, generally resulting in better use of the labor force.
- Staggered scheduling will usually lead to reduction in idle time and is more adaptable to the fluctuating pattern of activity in a foodservice operation.

Example of a Master Schedule

Day : Sunday		Date: 14 March 2010													
Time	WEEK 1							WEEK 2							
	M O N	T U E	W E D	T H U	F R I	S A T	S U N	M O N	T U E	W E D	T H U	F R I	S A T	S U N	
A	X											X			
B		X						X							
C			X						X						
D				X						X					
E					X						X				
F					X						X				
G				X						X					
H			X						X						
I		X						X							
J	X											X			

Example of a Shift Schedule

Day : Sunday		Date: 14 March 2010															
Time	AM						PM										
	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	
A																	
B																	
C																	
D																	
E																	
F																	
G																	
H																	
I																	

Example of a Staggered Schedule

Day : Sunday		Date: 14 March 2010															
Time	AM						PM										
	7 to 8	8 to 9	9 to 10	10 to 11	11 to 12	12 to 1	1 to 2	2 to 3	3 to 4	4 to 5	5 to 6	6 to 7	7 to 8	8 to 9	9 to 10	10 to 11	
A																	
B																	
C																	
D																	
E																	
F																	
G																	
H																	
I																	

5.4 Control of Overtime

- Uncontrolled overtime will driving up labor cost.
- Employees may need to work beyond their normal hours but supervisor may use overtime as a substitute for proper scheduling and planning with proper staffing and realistic work schedules, overtime becomes necessary only in emergencies.
- Overtime that can be anticipated may be controlled by requiring overtime authorization.

Overtime Authorization	
Name: _____	Date: _____
Reason for Overtime: _____	Unit: _____

Amount of Overtime: _____	Hours

Signature of Unit Manager	

5.5 Alternate Schedules

Alternatives to the standard workweek have been a topic of interest and experimentation in recent years. Trends have included the introduction of several discretionary time work schedules and new forms of part time employment. These new approaches can be grouped into two categories:

I. Compressed workweek

- A change in days holds the total hours constant but reduces the number of days worked so that employees may work, for example, a 4-day week, 10 hours per day.
- The second pattern, a change in hours worked, shorten the number of hours in the week, but the number of days worked remains the same. A 7-hour day, for instance, is characteristic of some organizational scheduling patterns.
- The third pattern is a change in days and hours, in which both dimensions are changed.

II. Discretionary working time

- Modification to the standard workweek include the staggered start system and flexible working hours.
- In using the staggered start, the organization or the employee choose from a number of management defined operations when they wish to start their fixed-hour working day.

Food and Beverage Cost Control

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Module 6

MEASUREMENT COST

Objectives:

- Discuss on causes of differences in labor cost.
- Describe the four steps in control process.
 - Define what is included in labor cost.
 - Define who control the cost of labor.

LABOR COST RATIOS

- Since the hospitality industry is so diverse, it is impossible to be specific in establishing guidelines within which the labor cost as a percentage of revenue should fall for any particular operation.
- The same applies, of course, to food and beverage cost percentages discussed in earlier chapters.
- For example, in the case of hotels and larger motels with food and beverage facilities, the labor cost will generally be between 30 percent and 40 percent of overall revenue.
- However, it would well be lower than 30 percent in the rooms department and be above 40 percent in the food operation.

- 
- In order to operate smaller motels which provide no facilities other than rooms, the labor cost might range from 10 to 30 percent of room revenue.
 - In restaurants, the range of possible ratios can be extremely wide.
 - For example, a self-serve or drive-in fast food operation could have a labor cost as low as 10 percent of revenue. Otherwise for luxury restaurant operation might have a labor cost as 60 percent of revenue.
 - The restaurant industry average generally falls into the 25 to 35 percent range.

Causes of Differences in Labor Cost

Many factors can cause major differences in the labor cost percentage from one hospitality industry enterprise to another. Some of these are;

I. The physical plan

- The layout may dictate more or fewer employees on duty at any time.
- An efficiently planned layout will reduce the number of employees required.
- The age of the property can also be a factor, older establishments are usually less efficient by today's standards and also frequently require more labor for janitorial and maintenance work.

II. Use of equipment

- Establishments that can use and afford certain items of equipment may be able to reduce the number of employees and thus the labor cost.
- More automated dishwashing machines, electronic liquor-dispensing equipment, computerized front office and accounting machines are all improvements that generally mean fewer employees are required.

III. **Location**

- A well located operation will usually enjoy a higher level of business (and thus a reduced labor cost percent) than a similar operation less well located.
- For example, a motel on a major highway will enjoy a higher occupancy level on average than a competitive motel located close by but not on a major highway.
- Similarly, a restaurant catering to the business luncheon trade and located in the centre of the business district will probably have a higher seat-turnover and thus higher revenue and lower labor cost percent, than a similar restaurant located on the fringe of the business area.

IV. **Unions**

- Establishments whose employees are covered by a union contract will generally have a higher labor cost relative to revenue than would establishments whose employees are not covered by union contract.
- Unions generally obtain higher levels of pay and more fringe benefits (which are a part of total labor cost) for their members.



V. Market demand

- The particular customers that an operation caters to can be affected by the demands of the market, and thus change the labor cost ratio.
- For example, a resort hotel catering to the middle-income-bracket customer might find its revenue dropping drastically and its labor cost percentage increasing as a proportion of revenue, in recessionary times or when unseasonal weather continues for a long period of time.
- Weather can also affect certain types of operation on a daily basis. For example, a drive-in restaurant catering primarily to ice-cream-related menu items can have a high fluctuation in daily revenue, and thus labor cost percentage, on cold, wet days.

VI. Government legislation

- Operations affected by government legislation (for example, a minimum hourly rate that must be paid) may be at a disadvantage over those operations not so covered.



VII. Restaurant menus

- The menu is often dictated by the type of market, determined the number of individual items offered, the amount of kitchen preparation time required, the style of service needed for certain menu items, and the availability and use of pre-prepared or convenience foods, are usual of the factors that can affect the labor cost.
- For example, a luxury restaurant need hiring professional employee who has more skills for accomplish the tasks (cooks in front of the guest). While, stall only need hiring somebody who can cooks. In this situation, the labor cost will be different according who are were hired.

Control Process

- Before proceeding, it will be useful to review the four steps control process.
 1. Establish standards and standard procedures for operation.
 2. Train all individuals to follow established standards and standard procedures.
 3. Monitor performance and compare actual performance with established standards.
 4. Take appropriate action to correct derivations from standards.
- These four steps are as important to labor cost control as they are to both food cost control and beverage cost control.
- They will provide the framework for the discussion of labor cost control.

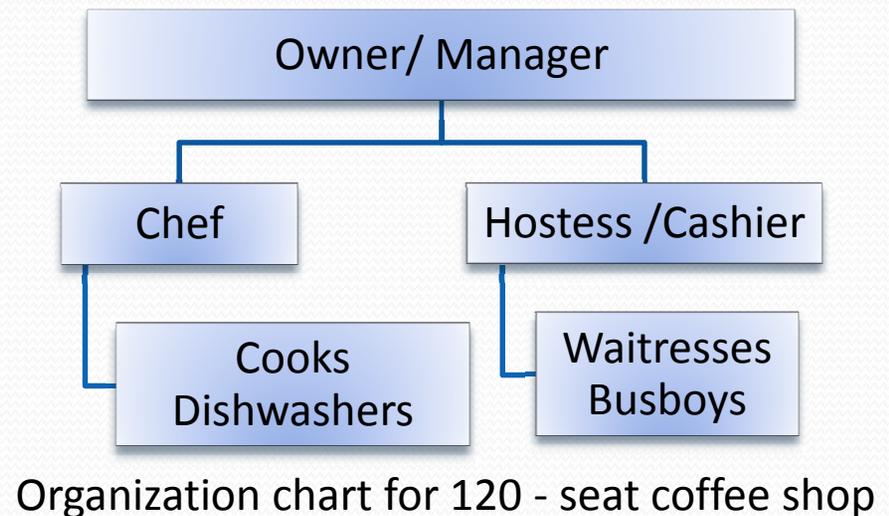
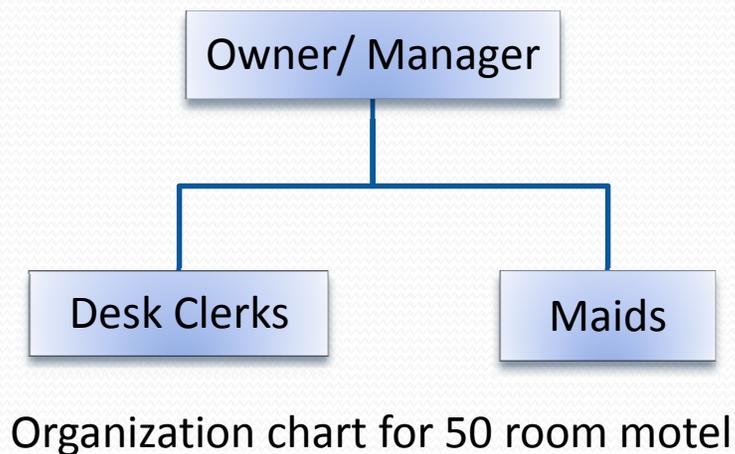
What is included in Labor Cost

- The cost of labor is the base rate plus additional benefits, which equals total cost. The base rate is the fixed salary that a person receives, stated on a weekly, monthly or annual basis.
- For hourly paid employees, it would be the number hours worked for a period of time multiplied by the hourly rate for the job. If overtime is involved, then the overtime rate would be used for the overtimes hours.
- Generally, salaried employees do not receive overtime for extra hours worked. Usually, they would receive time off or some other form of compensation.

- 
- Included in the fringe benefits to be added to the base pay would be such items as vacation pay, workers' compensation, social security, unemployment compensation, group and/or medical insurance, dental insurance, cost of free meals and sick leave.
 - The cost of fringe benefits can be readily calculated in most cases and is often surprisingly high, frequently as high as 20 to 30 percent of the base pay. Because the amount of fringe benefits can vary considerably from establishment to establishment, it is often difficult to compare total labor cost figures for two otherwise similar operations.
 - Therefore, on hospitality industry income statements, the base pay amount and the employee benefit amounts are generally shown as two separate expenses. However, when an establishment is setting labor cost objectives, it should clearly know what the employee benefit amount or level is and include it in cost calculations.

Who controls the cost of labor?

- The question of who controls the labor cost in an organization, it is really depends on the size of the operation and on its organization.
- For example, an organization charts for a small motel and for a coffee shop, respectively-both owner operated.
- It is quite to likely that, in smaller hospitality enterprises of this type, no formal organization chart would be developed on paper (as is normal in larger organizations). Nonetheless, the `organization' is still there and is recognized by employees.
- In such small, owner operated establishments, control cost of labor would be in the hands of the owner/manager.



Food and Beverage Cost Control

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Module 7

FINANCIAL STATEMENT AND ANALYSIS

After reading this module, students should be able to;

- Examining components of financial statements and their relationship to other components in the statement to gain deeper understandings of the company's performance.
 - Determine the value of the food utilized to realize current food sales.
 - Calculate cost of food sold.
 - Identify the usage of cost of sales percent.

Introduction

Financial Statements

- Financial statements are reports that are based on the operation's accounting records and these reports provide pertinent information on the operation's activities.
- Management must be able to read, understand and evaluate financial statements in order to control the costs. There are two basic reports; the **income statement** and the **balance sheet**.

Income statement

- An income statement displays the profit or loss that a company has realized over a specific period, such a year.
- The statement reports sales, cost of sales and the other expenses. The margin between sales and costs equals the profit or loss.

Balance Sheet

- The balance sheet reports the financial condition of the company at a point in time.
- The basic design of the balance sheet is based on the fundamental accounting equation;

$$\text{Assets} = \text{Liabilities} + \text{Equity}$$

- **Current assets** are cash and other assets that will convert into cash within one year.
- **Fixed assets** are the tangible permanent resources of the business.
- **Current liabilities** are amount payable within one year.
- Whereas **long term liabilities** are amounts payable beyond a year.

Analyzing Financial statements

- Financial analysis is the process of examining components of financial statements and their relationship to other components in the statement to gain deeper understandings of the company's performance.

7.1 Food Cost

What is the purpose of calculating food cost?

- In order to determine the value of the food utilized to realize current food sales, the cost controller calculates costs on a today, month to date basis.
- The daily figures provide management with a reliable guide as the month progresses. If costs are out of line, the causes can be determined and corrective action taken immediately.

7.2 Food Cost Accounting System Definition

- Food cost accounting relates to the recording of food cost. We have previously seen this items when exploring the income statement .

Budget-Income statement

Sales

Food	3,300
Beverage	1, 105
Total sales	4, 405

Cost of sales

Food	1, 320
Beverage	331
Total cost of sales	1, 651
Gross Profit	2, 754

- The issue of cost accounting deals with the recording of cost of sales, management reports analyzing these costs and controls used by management to monitor food and beverage costs.

Food cost of sales is calculate as follows;

Value of opening inventory	RM 425.00
Add Purchases	RM 1263.00
Total inventory available	RM 1688.00
Less Closing Inventory	RM 50.00
Value of food consumed during period	RM 1338.00
Less Value of employee meals and other Adjustments	RM 18.00
Cost of Food Sold During Period	RM 1320.00
Food Sales	RM 3300.00

- As can be noted from the above calculation it is important to determine the cost of food used for employee meals since this amount is deducted from the cost of food consumed in order to arrive at the cost of sales amount.

Cost of Sales Percent

$$\text{Cost of Sales} = \frac{\text{Cost of sales}}{\text{Sales}}$$

$$= \frac{1320}{3300}$$

$$= 40.0 \%$$

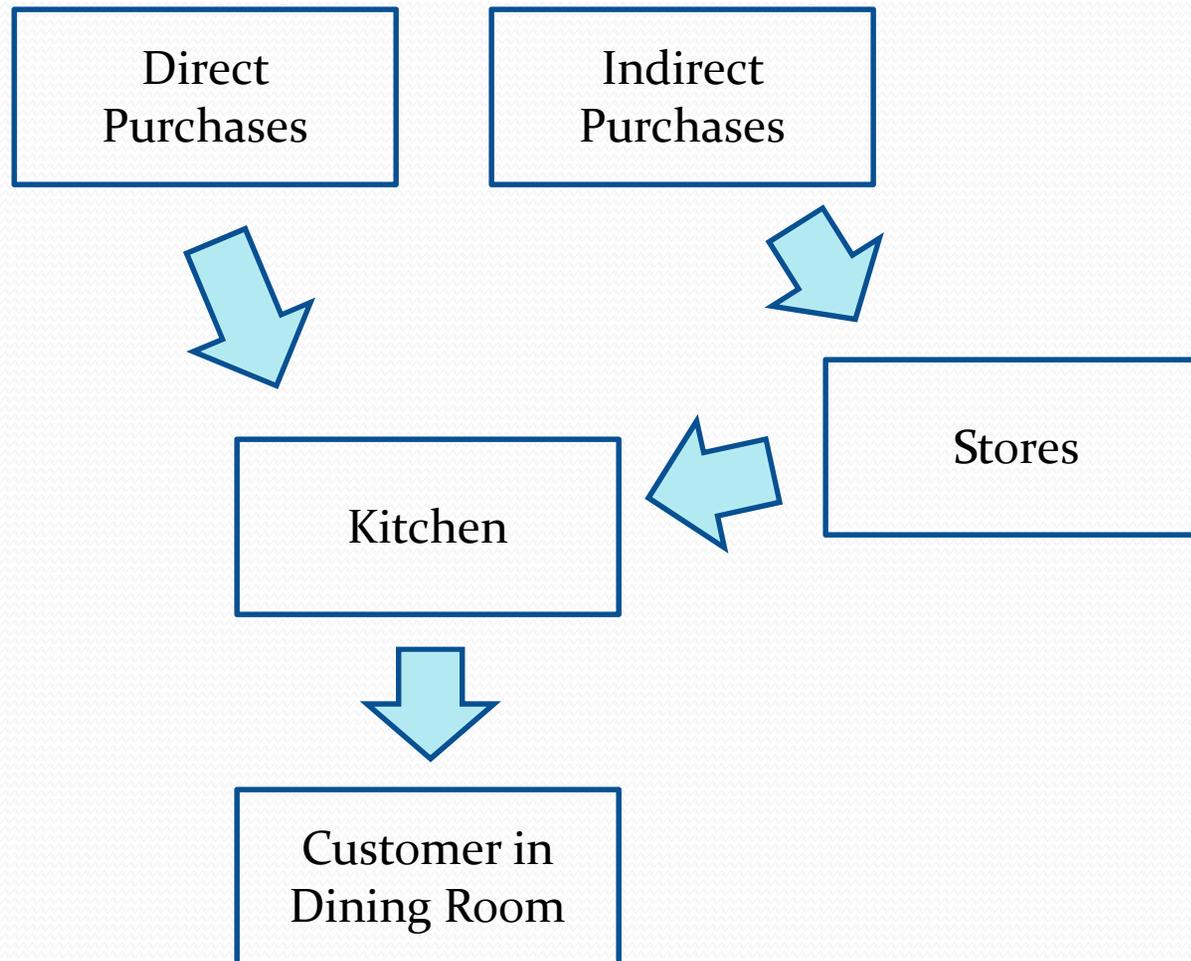
What the usage of cost of sales percent?

- The food cost of sales percent is a useful ratio for monitoring food cost. The ratio is calculated by dividing food cost by food sales.
- In the above example the a restaurant has food cost of 40 percent. If management considers this a reasonable percent, they can then use it to monitor actual food costs.
- Management can also use the percent as a standard to develop menu selling prices.

Daily Cost Control

- Under traditional accounting methods, the cost of sales amount is computed once a month at the time the monthly income statement is prepared.
- To properly control food costs management needs to monitor cost numbers on a weekly, or better yet, daily basis.
- To determine an accurate daily cost of food sold the following items need to be determined;
 - i. Direct purchases, which are food products shipped directly to the kitchen for consumption on a daily basis. Indirect purchases are shipped to stores. The kitchen makes requisitions from stores as needed.
 - ii. The total of direct purchases and requisitions equals cost of food consumed by the restaurant.
 - iii. Cost of food consumed amount is then adjusted for employee meals and food transfers with other departments (such as the bar), to arrive at the final food cost of sales amount.

- This relation ship can be visualized by visualized by the following flow chart:



Computing Actual Food Expenses

Food Cost Formula

Beginning inventory
(**Plus**) Purchases
Goods available
(**Less**) Ending inventory
(**Less**) Employee meals
Cost of Food Sold

Exercise

Roselina has just been employed by Hanis's Catering as a restaurant manager. She is not familiar with her current job therefore she is having a problem in calculating the cost of food sold. Given the information, help her in computing the actual cost of food sold.

Inventory 31 st March 2009		RM 25 184.50
Expenses in April		
Meat	RM 12 501.00	
Dairy	RM 7321.00	
Fruit and Vegetable	RM 8641.00	
All other foods	RM 30 384.00	
No, of employee eating daily		85
Employee meal allowances		RM1.50/per employee
Inventory 30 th April 2009		RM 26 942.06

(10 Marks)

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Module 8

RECIPE COSTING

After reading this module, students should be able to;

- Identify food cost ought to be.
- Explain the importance of standard portion size.
- Explain the importance of standardized recipes.
 - Identify the definition of menu.
 - Describe 4 types of menu.
- Determine actual and attainable product costs yield testing.

8.0 Standard Cost

- Important that management know that its food cost ought to be in addition to what they actually are.
- "Standard Costs" are what costs ought to be.
- They are determined on the basis of the portion served to a customer and the ingredients that go into the preparation of a particular item.
- Both must be determined before a standard cost can be computed.

8.1 Standard Portion Cost

- One of the most important standards to be set by any restaurant is the portion size. i.e.: the quantity of any item that is to be served each time the item is ordered.
- Therefore standard portion size for any item is quantity that management intends to give each and every customer in return for a fixed selling price.
- Once standard portion sizes have been set, it is obviously important to make sure that each person responsible for producing an item knows what size portion he has to prepare.
- Over portioning has the effect of increasing operation costs. Changes in portion size must also be avoided because guests want to feel that they have received fair value for money. Consistency is a key to operational success in foodservice.



Importance of Standard Portion Cost

- Standard portion helps to reduce customer dissatisfaction.
- Standard sizes help to eliminate excessive costs from a food controller's point of view (perhaps the most important undesirable consequence is that costs are not under control and excessive costs develop).
- Portion size is very important to consider. In most cases, tools are available that will help employees serve the proper portion size
- One effective way is to post charts conspicuously on kitchen walls for ready reference.

8.2 Standard Recipes

- Menu writing and recipe development are mutually dependent activities. Once the menu is created, standardized recipes should be prepared for each item.
- **Standard recipe** is one that will produce a known quality and quantity of food for a specific operation.
- It specifies;
 - i. the type and amount of each ingredient.
 - ii. the preparation and cooking procedures.
 - iii. the yield and portion size.
- Standardized recipes are not found in books or provided by manufacturers; they are recipes customized to your operation cooking time, temperature and utensils should be based on the equipment actually available.
- Yield should be adjusted to an amount appropriate for your operation. A recipe must be tested repeatedly and adjusted to fit your facility and your needs before it can be considered standardized.



- Standardized recipes are a tool for the chef and management. The written forms assist with training cooks, educating service staff and controlling financial matters.

- They also help ensure that the customer will receive a consistent quality and quantity of product. Accurate recipe costing and menu pricing depends on having and using standardized recipes.

- A standardized recipe form such as;

- A. Name of product

- B. Yield

- C. Portion size

- D. Presentation and garnish

- E. Ingredient quality and quantity

- F. Preparation procedures

- G. Cooking time and temperature

- H. Holding procedures

8.3 Types of menu

Definition of menu

- A list of food items attached with the price.
- Serves as the primary control of the foodservice operation.
- It's control each subsystem and is the major determinant for the budget.

Menu are classified according to the regularity with which the food are offered;

i. **Static menu**

- All patrons are offered the same foods every day. Once a static menu is developed and established, it rarely changes.
- Static menus are typically found in fast-food operations, ethnic restaurants, steakhouses and the like. Can also be used in institutional settings.
- For example, a static menu at an elementary school could offer students, along with a vegetable and dessert, the same luncheon choices every school day; a cheese burger, fish sticks, chicken tacos, pizza wedges or a sandwich.

ii. **Cycle menu**

- A cycle menu is developed for a set time period, at the end of that period it repeats itself (i.e.: on a seven-day cycle, the same menu is used every Monday).
- Some cycle menus are written on a seasonal basis, with a new menu for each season to take advantage of product availability.
- Cycle menus are used commonly in schools, hospitals and other institutions. Although cycle menus may be repetitious, the repetition is not necessarily noticeable to diners because of the length of the cycles.

iii. **Market menu**

- A market menu is based upon product availability during a specific time period; it is written to use foods when they are in peak season or readily available.
- Market menus are becoming increasingly popular with chefs (and consumers) as they challenge the chef's ingenuity in using fresh, seasonal products.
- Market menus are short-lived, however, because of limited product availability and perishability. In fact, they often change daily.

iv. **Hybrid menu**

- A hybrid menu combines a static menu with a cycle menu or a market menu of specials.

8.4 Determining Actual and Attainable Product Costs Yield Testing

What is Yield Testing?

- This test determines how much usable and non usable product an item yields.
- Example; process a whole chicken to determine the weight for the breast, legs, wings, bones, etc.
- Yield % is the percentage of product you will have remaining after cooking, trimming, portioning or cleaning.
- Waste % is need to calculate the yield %, what is waste %.
- Waste % is the percentage of product lost due to cooking, trimming, portioning or cleaning.

$$\text{Waste \%} = \frac{\text{Product Loss}}{\text{AP Weight}}$$

$$\text{Yield \%} = 1.00 - \text{Waste\%}$$

Attainable Food Cost:

Date prepared : 1/8/93

Time Period : 1/1/93

Prepared by : J.C

Item	Number Sold	Portion Cost (RM)	Total Cost (RM)	Menu Price (RM)	Total Sales (RM)
Beef Stew	50	0.53	26.5	0.95	47.5
Corn Chowder	40	0.22	8.8	0.95	38
Ham & Beans	60	0.41	24.6	0.95	57
Turkey	30	0.51	15.3	2.95	88.5
Ham	90	0.60	54	2.6	234
Roast Beef	25	0.87	21.75	2.95	73.75
Coffee	75	0.10	7.5	0.85	63.75
Soda	125	0.23	28.75	1	125
Total			187.2		727.5

Total Cost = Number Sold x Portion Cost

Total Sales = Number Sold x Menu Price

Exercise

Sabrina operates take-out cookie store in the mall. Business is good and customers seem to enjoy the products. Her employees, mostly young teens, are a problem since they seem to like to eat the products also. Sabrina takes a physical inventory on a weekly basis. This week, her total cost of goods consumed figure was RM590.95. Sabrina has determined that this week she will also compute her attainable food cost and her operational efficiency ratio. Help Sabrina by completing the following information using the attainable food cost form.

Actual Product Cost:

Date prepared:

Attainable Product Cost:

Prepared by:

Attainable Food Cost:

Unit name: Sabrina's

Item	Number Sold (RM)	Portion Cost (RM)	Total Cost (RM)	Menu Price (RM)	Total Sales (RM)
Choc. Chip	85 doz	1.32		3.4/doz	
Macadamia	60 doz	1.61		4.1/doz	
Coconut Chip	70 doz	0.83		2.95/doz	
Fudge	141 doz	1.42		3.8/doz	
M&M	68 doz	1.39		3.4/doz	
Soft Drinks	295 doz	0.16		0.85	
Coffee	160 doz	0.09		0.75	
Total					