

Food and beverage operations: Purchasing and storage

Introduction

Food and beverage operations largely follow a basic input, process, output model. The inputs are the food and beverage ingredients and materials, the process includes storing, preparation, cooking, etc. and the outputs are meals and beverages to be sold via the service concept. Conceptually, food and beverage operations start with an idea for a theme or a desired style of restaurant. This will inform the first practical influence on the operation, the menu. Other influences will include the available space, the layout of the premises, the service style and if part of a group the number and the geographical locations. If the restaurant is located in a multi-operational site, for example a hotel, a food court, a hospital or a shopping mall, then other influences may affect the operational style and indeed the concept.

Whilst the operational process necessarily runs from input to output the design of such a process usually starts in reverse. An output objective is formulated via the catering policy, the marketing policy and the financial policy. Therefore the operational aspects of the restaurant are designed in such a way so as to support the menu style, the service style, the



financial objectives, staffing and quality issues. The final part of operations concerns controls, how these are implemented and measured. Food and beverage control may be defined as the guidance and regulation of the costs and revenue of operating the catering activity in hotels, restaurants, hospitals, schools, employee restaurants and other establishments. Controls are necessary for a number of reasons from the more obvious with respect to maintaining profitability, quality and reliability to those less obvious, staff morale, disciplinary problems and recruitment costs. Food and beverage control processes are considered in more detail in Chapter 7.

The 1995 Food Safety Act clearly outlines the legal requirements associated with the purchase, delivery, storage, handling, processing and sale of food and beverages and is detailed in the section headed health and safety.

Chapter objectives

After working through this chapter you should be able to:

1. Write a purchasing and storage schedule for any food and beverage item.
2. Write a detailed specification for a food item.
3. Recognize the value of a purchasing schedule to management.
4. Understand the contribution to profitability such a schedule can make.
5. Work out stock turnover.

PURCHASING

Purchasing can be defined as 'a function concerned with the search, selection, purchase, receipt, storage and final use of a commodity in accordance with the catering policy of the establishment'. This suggests that the person employed to purchase foods and beverages for an establishment will be responsible for not only purchasing, but also for the receiving, storage and issuing of all commodities as well as being involved with the purpose for which items are purchased and the final use of them. In many organizations this job role may come under the heading of procurement and be a function of the finance department.

The purchasing function as illustrated in Figure 6.1 is vitally important in the control cycle. Should it be managed inefficiently it creates problems that often result in an unsatisfactory level of both costs and profit for the establishment and dissatisfied customers. With no specifications for commodities there would be neither quality standards nor quantity standards resulting in over-ordering or under-ordering, as yields for items would be

Policies set by management	Determines market segment aimed at, target price to be paid, the quality required and the price to be charged to customers. Sets Standard Operating Procedures (SOPs) to regulate purchasing function
Menu	Determines the choice of items available to customers
Volume forecasting (see also purchasing and storing)	Determines the quantity to be purchased
Requisition (paper or electronic)	Indicates the particular requirements of each sales outlet
Purchasing	Selects suppliers, contracts, minimum and maximum quantities and quantity discounts available. Ensures adequate temperature controlled storage is available. Specifications for individual items and to ensure continuity of supply
Receiving	Inspects for quantity and quality reports to control any discrepancies, checks conformity with required temperature statutes and maintains records for HACCP. Checks delivery vehicle temperatures as laid down in SOPs
Storing	Correct storage for each item, ensures that all temperature sensitive items are stored quickly and correctly and ensures freezers and refrigeration are not overloaded
Production	Preparation of items purchased
Selling	Provision of satisfactory products at the correct selling price/cost and quality
Control	The measurement of performance of all outlets involved, adherence to company policy and SOPs and provide feedback to management

Figure 6.1 The purchasing function

indeterminable. The receiving department would only be able to check on quantity and not on quality. The work in the stores and preparation departments would be difficult with the quality of produce varying greatly. Finally, it would be difficult to measure satisfactorily the performance of departments if they were continually being provided with non-standardized commodity items.

Responsibilities of the purchasing function

Many of the responsibilities of the purchasing manager have been subsumed into other job roles particularly in smaller organizations. Typically, the senior chef or the chef's clerk will place orders with suppliers or in the case of liquor stocks the restaurant manager or cellar manager will place orders. In the vast majority of cases, other than perhaps the small owner-operator establishments, orders would be placed with approved suppliers with terms and conditions pre-approved by management and usually controlled by the finance function. In larger organizations a purchasing clerk or procurement officer within the finance office may cover the purchasing role.

Figure 6.2

Purchasing objectives (Source: Adapted from Purchasing: Selection and Procurement for the Hospitality Industry, 6th edn. 2005)

1. Maintain and adequate supply – since customer service is really the only thing sold, running out of a key item frustrates an operator's customer service goals, so adequate stock that prevents running out is crucial to good management.
2. Minimize investment – this objective seems to conflict from the first, however buyers must find some kind of trade-off between the investment level and the risk of running out, a compromise between the investment level and ensuring a continual flow of products.
3. Maintain quality – maintaining quality is not the same as establishing a quality level. Some buyers have little control over the quality they must purchase but do have a major responsibility to maintain the level of quality once set by management. The ability to maintain quality will vary amongst products, branded goods are relatively straightforward, fresh produce may vary drastically. The buyers responsibility is to ensure adequate strategies are in place to overcome any difficulties.
4. Obtain the lowest possible price – which may not necessarily be the lowest price quoted. Buyers need to be aware that the price comparison should reflect the yield of the product.
5. Maintain the company's competitive position – may be viewed as attempting to gain better prices than the competition. In reality better prices are often the prerogative of companies with higher buying power either through their size or perhaps through belonging to a consortia.

The duties of the purchasing function will vary between establishments but however this role is covered and it will usually include aspects of the following:

1. Responsibility for the management of purchasing/procurement and keeping purchasing records, recording the receiving and correct storage of goods.
2. The purchasing of all commodities within their responsibility.
3. Ensuring continuity of supply of those items to user or departments.
4. Finding cheaper (for same quality) and more efficient sources of supply where this forms part of the job role.
5. Keeping up to date with all the markets being dealt with and evaluating new products.
6. Research into products, markets, price trends, etc.
7. Co-ordinating with production departments to standardize commodities and therefore reduce stock levels.
8. Liaising with production, control, accounts and marketing departments.
9. Reporting to senior management usually through established communication channels.

In large establishments the purchasing function may be responsible for a wide range of non-food items including small equipment, cleaning materials, linen etc. According to Feinstein and Stefanelli (2005, pp. 108–109) there are five essential goals or objectives that the purchasing function should achieve (Figure 6.2).

THE PURCHASING PROCEDURE

Think of purchasing as a cycle, not a one time activity. Purchasing is not just a matter of phoning or emailing another order. You

don't want to run out, nor do you want to overstock', (Brown, 2005; p. 395).

The procedure can be broken down into eight steps:

1. Each section of the organization will have established stock levels and a procedure for stock replacement. This may be a requisition form from an authorized member of staff, for example, head chef, restaurant manager or from the storekeeper. With more sophisticated electronic point of sale (EPOS) systems currently in use many stock out or low stock alerts are raised automatically by the system. In larger organizations these systems may even generate an order and send it electronically to the approved supplier.
2. The selection of the source of supply is usually agreed in advance by the department manager or by head office so that contracts can be agreed, for example the price to be paid, delivery performance with particular reference to the time, date and the place of delivery.
3. The ordering process is electronic, telephone or written order.
4. The acceptance of goods ordered and the adjustment of any discrepancies in quality or quantity of goods delivered, checking delivery notes/invoices.
5. Checking the temperature of the goods on delivery and recording this in writing.
6. Checking the condition of packaging or containers and rejecting those that are not in good condition.
7. Periodically checking the temperature of the delivery vehicle and recording this in writing.
8. The transfer of commodities to the ordering department or to the stores or cellar.

The procedure should meet the requirements of the Food Safety Act 1995 and the established Hazard Analysis and Critical Control Point (HACCP) for an establishment which should reflect the type of establishment and the market it is in, for example, a hospital or first-class restaurant so that any hazard may be viewed within this context; the location of the establishment in relation to that of its suppliers; the size of storage facilities available; the forecast of future requirements; the shelf life of the food or beverage item. Whatever the establishment a sound purchasing policy and control system should be implemented if satisfactory standards are to be achieved.

'Purchasing is not a separate activity. What how and when you buy must always reflect the overall goals of your establishment. Trends change – so must you, the purchaser.

Use a simple five-prong purchasing strategy, you want to buy:

1. The right product
2. The right quality
3. At the right price
4. At the right time
5. From the right source.

Write your plan down on paper save it any place where other members of staff will read it, you never know when someone will have to deputise', (Brown, 2005; p. 396).

The selection of a supplier

With global markets and competitive pricing selecting a supplier should be given careful consideration. Seeking a new supplier requires caution and detailed enquiries need to be made in at least the following areas. Initially larger organizations will carry out routine credit reference checks to ensure that companies are bona fide.

1. Full details of the firm and the range of items they are selling.
2. A copy of recent prices lists.
3. Details of trading terms.
4. Details of other customers.
5. Samples of products.

In all cases of food purchasing a visit should be made to any potential supplier to see the size of the company, the full range of products, the size of processing and storage facilities, the size of their transport fleet and to meet members of the management team. It is an essential process that should be recorded as part of the organizations HACCP policy and forms part of the due diligence criteria.

Selected suppliers will be added to an approved suppliers list and will be periodically evaluated for their performance using performance criteria established for each range of goods. Typically this would include price, quality and delivery.

PRICE AND QUALITY PERFORMANCE

Whilst the price paid for goods is important it is value for money and fitness for purpose that guides most buying decisions. Essential to any business is continuity of supply and the building of a sustainable relationship with a supplier that are often greater importance than saving a few pence per item.

The cheapest item is not necessarily the best buy; often a cheap item is of a low quality and may not perform well against purchase specifications, for example not obtained from an ethical source, genetically modified, not organically produced.

Delivery performance

This is the ability of the supplier to meet agreed delivery times and dates with the buyer. Prompt deliveries mean that the goods will be delivered when required and when staff is available to check them efficiently for quantity and quality. The delivery of food is regulated under the Food Safety Act 1995 temperature controls and falls under the establishment's record of HACCP.

Aids to purchasing

The preceding pages have attempted to reduce the complexity of the total purchasing activity to a simplified outline. There are, however, two main problems that continually confront buyers. They are:

1. Keeping up to date with what is available in all the markets in which they are dealing.
2. Keeping up to date with the current prices for all commodities. This is very important, as it enables buyers to negotiate with suppliers more efficiently and to compare the prices that they are being charged.

In order to reduce these difficulties, buyers need to be aware of what general information services are available that will help them. These aids may be grouped under some six headings:

1. *The supply trade press*: Trade journals are published weekly and cover most of the commodities to be purchased. They give valuable current general information and indications of future trends.
2. *The commodity trade organizations*: These organizations will readily provide information to caterers about a particular commodity, such as the types available, how they should be stored and names of local and national suppliers.
3. *The catering trade press*: These papers and journals contain items of commodity news and information of present and future prices.
4. *The national press*: Leading newspapers publish commodity market news with details of the range of prices being paid in certain markets.
5. *Government publications*: These are available from agricultural departments giving a variety of information such as a national food survey response, availability of specific commodities and current food legislation.
6. *Published price indexes*: These are produced by government departments, consumer associations and by trade journals. These indexes start from a particular date in time listing large groups of commodities and monitor the change in prices from that initial period, also recording changes on a yearly and monthly basis. This is of great significance to the caterer as it provides information of general and specific price trends and a comparison against the prices that he has paid for commodities recently.

THE PURCHASING OF FOODS

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. The true cost calculation has

to take into account the invoice price less any discounts claimable; storage cost of the item (this is particularly relevant when purchasing large quantities at a special price and includes the problem of a further security risk); and the production costs. The calculation of a true cost may well indicate that it is cheaper to buy in five-case lots as against a fifty-case lot at a lower price, or that the production costs involved with an item make it too expensive to buy it in that state, and that it may be cheaper in the long run to buy the item already processed by a manufacturer.

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

Purchasing by contract or tender

Purchasing by contract relates specifically to large scale catering operations, for example Wimbledon fortnight, where specific foods are needed in large quantities (e.g. strawberries). There are two common types of contract used: the organization will advertise the tender in the trade press, for example offers are invited to supply fresh fruit and vegetables for the period of one year or for a specific event.

1. *The specific period contract* which aims at determining the source of supply and the price of goods for a stated period often of three or six months. This reduces the time and labour of negotiating and ordering to a minimum, plus it has the added 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* that 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 use in a banqueting or a summer season are typical examples when the supply could be affected by the weather conditions with subsequent price fluctuations and where a quantity contract is advisable used.

Note that a contract is a legal document and that the conditions of the contract should be prepared by the firm's solicitors to safeguard against possible areas of dispute or, alternatively, prepared using the guidelines available from one of the professional bodies.

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. Whilst the 'cash and carry' food warehouse is only available to traders there are often equally good prices available in retail supermarkets/superstores particularly for small quantities or highly perishable items like bread and milk. Many supermarkets are now open for twenty-four hours.

The particular advantages of buying by 'cash and carry or retail superstores' are:

1. The warehouses are situated near to most catering establishments and their hours of business are usually longer than those of most food wholesalers.
2. Small or large quantities may be purchased at competitive prices.
3. Customers are able to see what they are buying, as against buying just from a price list or catalogue. They may also see special displays of a particular food company's products and be able to taste them.
4. Customers may use the warehouse as often as they like and in doing so they keep the level of stocks held low. Also, when there is a sudden increase in their business it is easy for caterers to replace their stock.

There are two disadvantages of buying by 'cash and carry':

1. Caterers have to provide their own staff and transport to collect the items from the warehouse.
2. Caterers have to pay cash for the items they purchase.

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. Large catering companies may purchase the entire output from one supplier or group of suppliers particularly where these products are a feature. Examples of products that are purchased by this method are organically grown fruit, vegetables, hand reared or specially bred meat or the entire haul of local fishermen. For this to be successful the trading has to be equally fair to both parties and therefore requires a certain level of trust in the relationship.

Total supply

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 paperwork; and far fewer deliveries. The main disadvantage is that of being tied to one major supplier, whose prices may not be as competitive as when using several suppliers and whose range of certain commodities may

be limited. It is not commonly used by commercial enterprises but is used, for example by the British Army for logistical reasons including delivery overseas sometimes in hostile areas.

Purchase specifications for food

A purchase specification is a concise description of the quality, size and weight (or count) required for a particular item. Each specification would be particular to an establishment and would have been determined by members of the management team (Figure 6.3) (e.g. the purchasing manager, head chef and the food and beverage manager) by reference to the catering policy, the menu requirements and its price range. The relevant members of the management should keep copies of the specifications, the goods received clerk and the food control clerks and sent to all suppliers on the 'approved suppliers list'.

The reasons for preparing specifications are:

1. It establishes a buying standard of a commodity for an establishment so that a standard product is available for the kitchen and restaurant to prepare for the customer.
2. It informs the supplier in writing (and often aided by a line drawing or photograph) precisely what is required, and it assists the supplier in being competitive with pricing.

	Product specification strip-ion-special trim i.e. contre-filet
Definition	1 Taken from hind quarter of Aberdeen Angus beef 2 Taken from a sirloin XX
Weight range	1 Between 10.5 – 12.5 k 2 Average weight per delivery between 11.25 – 11.75 k
Surface fat	1 An even covering of fat not exceeding a thickness of 19 mm
Suet deposits	1 To be completely removed
Length of 'tops' (flank)	1 Not to exceed 25 mm
Depth of 'eye' muscle	1 The main 'eye' muscle to be not less than 75 mm
Gristle content	1 All small 'caps' of gristle on the underside of the 'eye' muscle to be removed 2 'Back strap' gristle, which is situated on top of the striploin together with its covering of surface fat to be completely removed
Side chain	
Boning	1 To be completely removed All boning to be done cleanly so that: 1 No bone fragments remain 2 All rib and vertebrae bones are removed 3 No rib fingers remain 4 No knife cuts deeper than 12 mm

Figure 6.3 An example of a classical product specification for a catering cut of beef (Source: Adapted from Bernard Davis, Food Commodities, 2nd edn. Butterworth-Heinemann, 1991)

3. It provides detailed information to the goods received clerk and the storeman as to the standard of the foods to accept.
4. It makes staff aware of the differences that can occur in produce, for example, size, weight, quality, quantity, etc.

Whilst a detail product specification can be written it still may not achieve the level of quality assurance desired, and sometimes this cannot be checked by the organization, for example, if a product has been subjected to irradiation or has been genetically modified. The regulation of food in the UK is controlled by the Food Standards Agency and although they do not prescribe specifications to a level desired by the caterer they do provide safeguards and standards in line with European Community and UK Regulations. Grading of fruits and vegetables produced in the EC, and the classification of carcass meat, and regulation in the use of genetically modified or irradiated produce is well established.

‘A product specification, sometimes referred to as ‘product identification’, is a description of all the characteristics in a product required to fill certain production and/or service need. It typically includes product information that can be verified upon delivery and that can be communicated easily from buyers to suppliers. Unlike the product specification, which includes only information about the product, the ‘purchase specification’ implies a much broader concept. The purchase specification includes all product information, but, in addition, it includes information regarding the pertinent supplier services buyers require from suppliers who sell them products. They usually seek long-term relationships with several primary sources and intermediaries and, before entering into these relationships, want to iron out every detail concerning product characteristics and desired supplier services’, Feinstein and Stefanelli (2005, pp. 149–150).

Part of a purchase specification may include details of ethical sourcing, food air-miles, fair trade products and sustainability. Many customers are interested in these areas and if details can be included either on menus or other promotional material it can create additional marketing advantage.

Branding has assisted caterers to be more prescriptive when writing specifications as brands come with their own ‘branded’ quality assurance and tight specification. Brand protection usually means that suppliers will offer money back guarantees for products or produce that fails to meet customer expectations. This together with regulation on packaging and labelling assists caterers to purchase goods with confidence.

Whilst many establishments still use this type of purchase specification it requires both considerable knowledge to understand the specifications and considerable time and effort to write the initial specification. Even when this is done an item such as striploin although it may often be roasted whole it takes considerable skill to turn a striploin into portion-controlled steaks. With the move towards more convenience products many organizations prefer to order pre-cut steaks and joints at a price and quality determined by the supplier.

Group activity 1

Consider an item of meat, fish or cheese that you buy on a regular basis. Without using any brand names write a purchase specification for that item. Once completed pass to another member of your class and ask them if they feel confident of buying the right item.

THE PURCHASING OF BEVERAGES

The purchasing of alcoholic and non-alcoholic beverages, like that of foodstuffs, has the aim to purchase the very best quality of items, at the most competitive price, for a specific purpose. As beverages will frequently contribute more to profits than foods, and as they require considerably fewer staff to process them into a finished product for the customer, it is essential that adequate attention be given to this area. What is important to bear in mind always when purchasing beverages is that branded products are more likely to be attractive to the customer.

With beverage purchasing the following points are generally noticeable:

1. There are fewer and often restricted sources of supply.
2. The high value of beverage purchases so consideration of stock holding size, value/cost and security are important issues. Wines particularly need proper storage particularly if you intend to keep them for any time.
3. That free advice and assistance with purchasing are given by the wine and spirit trade, this particularly helpful with regard to setting and maintaining a good wine list.
4. That quality factors are difficult to evaluate and require special training to identify them. Also customers expect product knowledge from staff particularly when serving wines so this requires setting up or attending tasting sessions several times a year; your wine supplier usually facilitates these.
5. There are far fewer standard purchasing units than for food which makes pricing and stock control more straightforward.
6. There is an established standard of product. Many items like minerals, spirits, etc. will have a standard that will not vary over the years and items such as a well-known wine from an established shipper will be of a standard for a specific year, whereas with food items there may be several grades and a wide range of un-graded items available. In addition, food items may be purchased in different forms such as fresh, chilled, frozen, canned, etc.
7. The prices of alcoholic beverages do not fluctuate to the extent that food prices do.

A beverage selected for a wine list should match the operational style of the restaurant or wine bar and meet with customer expectations. It should complement the food menu and

be available for purchasing over a long enough period and at a price that is competitive. The continuity of supply of any wine selected as the house wine and this should be established before it is added to a wine list. Unusual or bin end wines may offer variety and interest to the wine list and should not be discounted just because they are in short supply.

Wine shippers

These are firms that purchase wine in the country of origin and ship it to whatever country it is to be sold in. Usually shippers are concerned with the wine from a particular region only. This means that the range of products that they are to sell is limited. Further to this problem, shippers are unlikely to want to deal with customers other than prestigious establishments or the very large companies. The products of wine shippers are usually bought from a wine and spirit wholesaler.

Wholesalers

These are usually the subsidiary wine companies of the large breweries or independent wine companies. The brewery companies sell their own label products as a first preference to other proprietary products. Wholesalers offer a very wide range of all beverages as well as a regular delivery service to the caterer. In addition they can assist the caterer with promotional literature for both bar and restaurant sales. As the beverage supply industry is highly competitive wholesalers will offer a range of marketing and merchandising support to selected clients.

Cash and carry

This method was discussed earlier in the chapter in relation to food. Cash and carry businesses or supermarkets offer a very limited range of spirits, wines, beers, etc. at very keen prices, but no other service. They are useful in emergencies or when special offers are being made.

Auctions

This is a method of purchasing that has limitations in that it usually is only for the sale of wines. It can be a useful way of buying 'end of bin' wines in small quantities from a private home or from another hotel or catering establishment. Provided that the wine buyer has a good knowledge of wines this can be an interesting and useful source for wines for a special occasion. It would be unlikely that the quantity offered would justify this method of purchasing of wines for inclusion in a standard wine list.

Purchase specifications for beverages

Generally beverages are sold and purchased by the brand name label of the product, each having a consistent quality and quantity standard of content for each selling unit. Specification for

wines also includes the details of vintage and shipper country of origin, alcoholic content and with the exception of France the grape variety.

It should be particularly noted that as the quality, consistency and quantity are virtually guaranteed the price to be paid for the product is very important, as it is the one factor that is not constant. It is for this reason that close attention is given by the purchaser to offers by suppliers of quantity discounts and promotions.

RECEIVING OF FOOD

In many catering establishments the receiving department is not considered to be a very important one, and people with little or no specialized knowledge often staff it. Unless this department operates efficiently, it becomes the weak link in the food control cycle and nullifies all effort in the rest of the control cycle. It may also pose problems in meeting the requirement of the organizations HACCP policy.

It is important to realize that all goods being received into an establishment 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 and most certainly come within the requirements of food temperature control regulations.

The main objectives are to ensure that for all establishments are:

1. The quantity of goods delivered matches the quantity that has been ordered. This means that goods may have to be weighed or counted.
2. The quality of goods delivered is in accordance with the specification stated.
3. The prices where stated are correct.
4. When the quantity or quality (or both) of the food delivered is not in accordance with the purchase order or an item is omitted from the order a credit note is provided by the driver. When this happens it is important to inform the end user as soon as possible.
5. An accurate record is made on the delivery note, recording details of the delivery including temperature and condition of packaging.
6. Goods should be decanted into clean storage containers where appropriate, for example, meat should be un-wrapped and stored in covered clean containers before being placed in refrigeration.

For larger organizations a purpose built delivery bay may be required. 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 job properly, such as a large and well-lit area, large scales with tare weights, copies of all purchase specifications and an office with a telephone. Further, whenever possible the purchasing officer should seek co-operation from the suppliers requesting them to arrive at set periods during the day, to spread the pressure of work at the receiving bay. Spot checks on this area are made by a member of the food and beverage management team periodically to help prevent fraud or pilferage, irregularities can go unnoticed for many weeks and be discovered only by accident or as a result of an enquiry into the reasons for the high cost of food purchased in relation to the sales.

High cost processed foods

In the majority of catering establishments such items of food as meat, especially 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:

Bar code tagging expensive food serves many purposes:

1. It aids the control of expensive foods.
2. It allows the receiving clerk to record each item, and to check against the delivery note/invoice.
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 bar code tagging of any items is as follows:

1. On receiving the items they are read by a bar code reader attached to a computer system.
2. This matches the item to the order/stock item/purchase requisition.
3. Receipt of the goods is logged onto the EPOS control system where it may be identified in a number of different formats depending on the company, for example per kilo or per portion.
4. The system is accessed as required by sector manager accounts office, chef or bar manager.
5. As sales go through the till the EPOS system reduces the stock holding proportionately.
6. In a sophisticated system EPOS may generate a new order requisition or order directly from the supplier.

STORING AND ISSUING 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. Food storage comes under food safety

regulations and forms part of the organizations HACCP policy. 'The basic goal of storage management is to prevent loss of merchandise due to: (1) theft, (2) pilferage and (3) spoilage', Feinstein and Stefanelli (2005, p. 328).

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. It is a requirement that different foods, meat, fish, dairy produce, fruit and vegetables, and deep frozen foods should be stored separately from each other. In practice some smaller establishments may mix certain categories but need to ensure there is no possibility for cross-contamination and that storage temperatures are not compromised. The non-perishable items (e.g. canned foods) go to a food store where they are unpacked, checked for any damage and placed on racking. The layout for the stores will vary between organizations but should facilitate ease of use and may include electronic stocktaking.

Issuing of food

Depending on the organization this may take place at set times during the day and may require a requisition note signed by an authorized person, for example head chef or restaurant manager. 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 control office often does the pricing of perishable items after they have been issued as they have access to the suppliers' invoices. Issuing may be done electronically by attaching product codes or reading codes from a chart as goods are issued.

STOCKTAKING OF FOOD

The main objectives of taking stock are:

1. To determine the value of goods held in stock. This will indicate if too much or too little food is held in stock and if the total value of stock held is in accordance with the financial policy of the establishment. The total value of food held in stock is also required for the profit and loss accounts and the balance sheet, by the organization's accounts department.
2. To compare the value of goods actually in the stores at a particular time with the book value of the stock which will have been calculated with the simple formulae of:

$$\begin{array}{rcl} \text{Value of opening stock} + \text{purchases} & & \text{value of} \\ \text{during the period} - \text{requisitions} & = & \text{closing} \\ \text{made in the same period} & & \text{stock} \end{array}$$

This will highlight any differences and indicate the efficiency of the stock control system in operation.

3. To list slow moving items. This will bring to the attention of the purchasing officer, the head chef, etc. those items that are in stock and for which there has been no demand, since the last stocktaking. Usually these items will then be put on to a menu to sell them before they deteriorate, or returned to the wholesaler and credit obtained.
4. To compare the usage of food with food sales, to calculate the food percentage and gross profit.
5. As a deterrent against loss and pilferage.
6. To determine the rate of stock turnover for different groups of foods. This is calculated by the formula:

$$\frac{\text{cost of food consumed}}{\text{average value of stock at cost price}} = \text{rate of stock turnover in a given period}$$

For example, in a twenty-eight-day trading period the cost of food consumed was £3,000. The opening stock on day 1 was £800 and the closing stock on day 28 was £700.

$$\text{rate of stock turnover} = \frac{3000}{\frac{800 + 700}{2}} = \frac{3000}{750} = 4.0$$

This means that in the twenty-eight-day trading period the total value of stock turned over four times and that an average of one week's stock was held during the period.

The rate of stock turnover will vary depending on the frequency of delivery, the commodity, the size of storage space available and the amount of money the establishment is prepared to tie up in food stocks.

Typical stock turnover figures for a month are at least twenty for perishable items (i.e. deliveries most days) and four for non-perishable items (i.e. deliveries once a week).

Stocktaking lists should be printed in a standard format and in some way related to the layout of the storeroom. This is so that stocktaking can be done methodically moving around the storeroom so that nothing is missed out; also, so that it aids the checking of figure-work by facilitating the comparing of like pages with like pages from previous stocktakes to ensure that there is normally a near standard stock of items between periods. In larger organizations stocktaking may be done electronically either by typing in codes or via a bar code system. Electronic systems have the advantage of speed and ease of use and therefore can reduce labour costs; can simultaneously calculate value both per stock item and total stock holding.

Stocktaking will typically be done every trading period (e.g. each month, every four weeks), or more frequently if a problem has arisen. Ideally, the stocktaking should take place at the end of a trading period and before the operational start of the next trading period. This usually means that the stocktaking will take place late in the evening or early in the morning. The end-of-year stocktake is usually done in greater detail and with some more thoroughness than for a trading period and will involve more staff, usually including the head of the control department to oversee and manage it. Professional stocktakers will often be used particularly for the end-of-year stocktake.

Activity 1

Given the stock turnover period shown in the example above make an argument for which of the following offers the caterer the best purchasing method; using wholesalers who provide thirty days credit or using a cash and carry where prices are 7% cheaper. You may use any of the information in this chapter on which to make your case.

RECEIVING OF BEVERAGES

The objectives for beverage receiving are similar in many ways to those of food receiving. However, as the value of beverage purchases is high and the potential for losses is also high, it is important that due attention is given to the receiving of beverages.

The main objectives are as for receiving food deliveries plus:

1. Crates and cases should be opened to check for such things as empty, missing or broken bottles.
2. An accurate record is kept of all chargeable empties delivered and returned.
3. Deliveries of beverages are timetabled with the suppliers so that those responsible for liquor storage are available.

STORING AND ISSUING OF BEVERAGES

Once beverages are received and checked they must be secured appropriately. Ideally and in larger organizations the storage of beverages is separated into five areas as follows:

1. The main storage area for spirits and red wine held at a dry and draught-free temperature of 55°F–60°F (13°C–16°C). This area is also used for the general collection and preparation of orders for the various bars and the storage of keg beers when there is a reasonable turnover.
2. A refrigerated area of 50°F (10°C) for the storage of white and sparkling wines.

3. A further refrigerated area of 43°–47°F (6°C–8°C). This is really necessary only when the turnover of kegs is slow as otherwise they may be stored at 55°F–60°F (13°C–16°C).
4. An area held at a temperature of 55°F (13°C) for the storage of bottle beers and soft drinks.
5. A totally separate area, from those above, for the storage of empty bottles, kegs and crates. This area needs to be as tightly controlled as the beverage storage area, not only because of the returnable value of the crates and bottles, etc. but to prevent free access by bar staff when an ‘empty for full’ bottle method of issuing is in operation.

The merchandise is unpacked in the cellar and stored correctly (table wines with an alcohol content of less than 16% by volume are stored on their sides, bottles of fortified wine, spirits and vintage ports are stored upright) on shelves or racks in the same order as on the standard bottle code/bin list. The objective for preparing a standard bottle code/bin list is to eliminate the confusion of bottle sizes, spelling of names and different brands, and to establish an appropriate starting point for the control of beverages.

As the majority of food and beverage operations currently use EPOS systems the establishment of a bin system is relatively straightforward. Each product is coded into the sales system-identifying unit of measure/s available and the price/s charged. This can be linked to a stock control system that informs management of current stock level at any given time. This can then be physically checked as required.

Cellar records: If the value of cellar stocks is high it will almost certainly be controlled via an electronic record system, where this is not the case it is usual for the following cellar records to be kept.

A cellar inwards book: This provides accurate reference to all beverages coming into the cellar, and posting data for the cellar man’s bin cards. Whenever necessary it is a useful check against the perpetual beverage inventory ledger held in the food and beverage control or accounts office.

Bin cards: These are provided for each individual type of beverage held in stock and record all deliveries and issues made, the cards being fixed on the shelves or racks against each beverage, the bin card numbers referring to the same bin numbers as the wine list and originating from the standard bottle code list.

Cellar control book: This provides a record of all daily deliveries to the cellar and the daily issues of each beverage from the cellar to the various bars and should cross-check with the entries on the bin cards and the various EPOS sales and inventory control system.

Ullages and breakages: It is necessary for any ullages and breakages to be recorded, together with an explanation, and countersigned by a member of the food and beverage management department. The frequency of the recording of any ullages and breakages would determine the necessity for management to take corrective action.

The term 'ullage' is used to cover all substandard beverages such as bottles of weeping wines, bottles of wine with faulty corks, unfit barrels of beer, etc. which, whenever possible, would be returned to the supplier for replacement. Breakages of bottled beverages usually occur by mishandling by cellar and bar staff.

Empties: Many of the containers of beverages such as crates, kegs, beer bottles, soda siphons, etc. are charged for by the supplier against a delivery. It is therefore necessary that control be maintained on these charged items to ensure that they are returned to the supplier and the correct credit obtained.

Hospitality book: This is necessary to record the issue of drinks to the kitchen and other grades of staff as laid down by the company policy.

Issuing of beverages

Issuing of beverages generally takes place at set times during the day and may require a requisition note signed by an authorized person. When stock is transferred from storage to sales point it may be entered onto the sales database depending on the system in use. The importance of recording the transfer of liquor stock only becomes necessary when either the person responsible for the stock changes or additional people have access to stock (i.e. bar staff). In these cases a duplicate copy of the transfer may be used, one for each party concerned.

The pricing of issues for beverages is different from that for food in that two prices are usually recorded, the cost price and the selling price. The cost price is recorded to credit the cellar account and for trading account and balance sheet purposes. The selling price is recorded for control purposes to measure the sales potential of a selling outlet using the basic formula:

$$\begin{aligned} \text{opening stock} + \text{purchases} &= \text{total beverage consumed} \\ - \text{closing stock} & \\ \text{total beverage consumed} &= \text{beverage revenue} \end{aligned}$$

It should be noted that the above formula might be calculated for the value of stock and purchases either:

1. At cost price in order to compare the usage with the actual sales and to ascertain the profit margin and beverage gross profit.
2. At sales price in order to compare potential sales with the actual recorded sales.

It is usual for the beverage revenue to be different from the sales potential figure because of such factors as a high percentage of mixed drinks being sold or full bottle sales being made over the counter of a bar.

Stocktaking of beverages

The main objectives of stocktaking are as those set out for food however it may be done more frequently:

1. To combat its higher susceptibility to pilferage.
2. To allow for more frequent orders and therefore less stock holding of expensive items.
3. To control the quality and condition of some highly perishable, short-life items for example real ales.

The rate of stock turnover is calculated the same way as food stock turnover:

$$\frac{\text{cost of beverage consumed}}{\text{average value of stock at cost price}} = \text{rate of stock turnover}$$

The rate of stock turnover for beverages will vary from unit to unit depending on such things as the size and type of the unit and its storage facilities, its location and whether it 'puts down' wine as an investment. Typically it will follow a similar pattern to stock turnover of food. Instituting 'par stocks' or stock levels based on usage, estimated demand, case sizes and delivery times may control the rate of stock turnover. Many organizations take advantage of weekly stock deliveries, which reduces the need to carry large values of stock or tie up large areas for storage.

Summary

- The purchasing function is an important element in the business control cycle in balancing inventory against investment.
- Correct purchasing maintains adequate levels of stock to meet the needs of customer service.
- Purchasing and storage is controlled under the HACCP process.
- Different categories of product require different strategies for procurement, most straightforward are branded goods and most difficult are fresh seasonal produce.
- Stock control and stocktaking are essential elements of the purchasing and storage function.
- The storage and issuing of high value inventory requires strict controls often 80% of stock value is invested in 20% of the stockholding.
- Product buzz words that customers respond to are organic, locally produced, sustainability and fair trade. If these fit your other criteria they are worth pursuing.

Further study options

Further reading on a wide range of articles on the business of purchasing, supply chain management and inventory control can be gained from:

1. International Journal of Information and Operations Management
2. International Journal of Purchasing and Materials Management
3. European Journal of Purchasing and Supply Management
4. Journal of Purchasing and Supply Management
5. Inventory Management Report.

For those who are perhaps interested in developing a career in this field:

1. The Chartered Institute of Purchasing and Supply (CIPS). Incorporated by Royal Charter in 1992, lead body in purchasing and supply chain management with courses, training, seminars and conferences available internationally.
2. European Institute of Purchasing and Management (EIPM). Founded in 1990, EIPM is the European centre for education and research into purchasing and supply management.

Study exercise

The Duck and Drake is a successful, privately owned 'free house' pub with an annual turnover of £400,000; 60% of the turnover is wet sales (beverage), 30% is food (using rather ad hoc menus) and the remaining 10% is from gaming (pool and slot machines). As owner-operators they view the turnover at the end of their second year as successful and have lived well off the business including most of their own food and beverage requirements. They are unaware of exactly how the sales revenue is made up by each component and what margins they make. They have also not seen the need to introduce any systems for controlling stock or purchases, relying instead on their own experience, an annual chat with their accountant where they look at the purchases against revenues and a family environment of honesty.

A brief look at the accounts identifies the following:

Beverage sales	£240,000	cost of sales	£115,000
Food sales	£120,000	cost of sales (including for own use)	£54,000
Gaming income	£40,000	50–50 share scheme	

Although successful in the eyes of the owners this business is not performing as well as it could. A new member of the restaurant staff has given the following feedback to the owners for the past couple of weeks gained from talking to the customers whilst serving them.

1. We don't come here as often as we would like because it is hard to know what's still going to be available on the menu, when we arrive, and it's embarrassing when one has guests!
2. I like to have a steak when I am out but I don't have them here anymore, they are so unreliable.
3. I hope the wine I have ordered is not that supermarket wine I had last time, it had their brand on the label and was four times the price!
4. Well I haven't been here since Christmas; I wasn't very well after that turkey dinner.

Advise the owners on what procedures they should adopt in terms of purchasing and storage that would mitigate these customer comments and generally improve the performance of the business.

Review questions

1. Define the main requirements of the purchasing function.
2. Define the main purchasing objectives.
3. How can you control quality as part of the buying process?
4. What is the advantage of buying through a 'cash and carry' outlet?
5. What are you seeking to achieve from a purchase specification?
6. How is a purchase specification different from a product specification?
7. Why is a beverage purchasing specification generally less difficult to write than a food specification?
8. What legislative policies cover the purchase and storage of food in the UK?
9. How can stock control improve profitability?
10. Why would a food and beverage manager be interested in the rate of stock turnover?

Further reading

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