## 5 Catering operations, costs and menu planning

In this chapter you will learn how to:

1. understand the organisation of kitchens, including:

- the importance of layout and workflow
- job roles, the staffing hierarchy and the partie system

2. know how to plan and prepare menus:

- the factors to be considered
- the technical terminology used


## 3. understand basic costs and apply basic calculations, including:

- using calculator and manual methods
- gross and net profit
- the factors which must be monitored to control food costs and profit
- calculating the food cost of dishes and determining the food cost per portion
- determining selling prices at specific percentages of gross and net profit.


## The organisation of the kitchen

Effective organisation will help a kitchen to run efficiently. An efficiently run kitchen will prepare and cook the right amount of high-quality food for the required number of people, on time, making the most effective use of staff, ingredients and equipment.

## Menus and the systems

Regardless of the size of the organisation, the most important factors in its success will be the menu and the systems used to prepare and present the food.

A kitchen with a large brigade of chefs can offer an extensive menu as long as the majority of the mise en place (preparation prior to service) is carried out during the day. The food can be kept refrigerated until it is needed at service time. If an establishment has a finishing kitchen, the final preparation and presentation of many foods (fish, meat, vegetables, potatoes, pasta and eggs) can be completed quickly and efficiently (by sautéing, grilling, deep frying, and so on) just before they are served, so the dishes are served to the customer quickly and freshly cooked. The design of the finishing kitchen is important and needs to include refrigerated cabinets for holding perishable foods, adequate cooking facilities and bain-marie space for holding sauces, etc.

Restaurants that provide a limited menu, such as steak houses, can employ fewer staff to cope with large numbers of customers, if they are organised well. The required standard can still be reached because few skills are needed. Nevertheless, whether producing grilled steaks or pancakes, the staff have to be organised and work in a systematic way so that the flow of work is smooth.

Other types of establishment, such as schools, hospitals, airlines and department stores, also have to produce large amounts of food to be served at the same time. In order to achieve this, the catering staff have to be well organised, and supplied with large-scale preparation and production equipment and the means to finish dishes quickly. There has to be a good system in place for the preparation-production-freezing or chilling-reheat cycle, so that staff can simply reheat or finish the foods just before service. It is essential that very high standards of hygiene are maintained in situations that use a system of deep freezing or chilling and reheating.

## Organisation and layout of the kitchen

As the costs of space, equipment, fuel, maintenance and labour are continually going up, considerable time, thought and planning must be given to the organisation and layout of kitchen
systems. The requirements of the kitchen have to be clearly identified with regard to the type of food that is to be prepared, cooked and served. The working areas and the different types of equipment available must be thought through carefully, and the organisation of the kitchen personnel must be planned.

In the late nineteenth century, when labour was relatively cheap, skilled and plentiful, the public wanted elaborate and extensive menus. In response to this, Auguste Escoffier, one of the most respected chefs of his era, devised what is known as the partie system, in which different sections of the kitchen were delegated to carry out specific jobs, such as preparing or cooking the fish, meat or vegetables. This system is still used in many establishments today. The number of parties (different areas) required, and the number of staff in each, will depend on the size of the establishment.

With a sound knowledge of fresh, part-prepared and ready prepared foods, together with an understanding of kitchen equipment and planning, a kitchen can be organised economically and efficiently. Even with two similar kitchens, the internal organisation is likely to vary, as each person in charge will have their own way of running their kitchen. However, everyone working in the system should know what he or she has to do, and how and when to do it.

The kitchen organisation will vary according to the size and type of establishment. Obviously the organisation of a kitchen with 100 chefs preparing banquets for up to 1000 people and a lunch and dinner service for 300 customers with an à la carte menu and floor service, will be quite different from that of a small restaurant serving 30 table d'hôte lunches, or a full-view coffee shop, a speciality restaurant with a busy turnover or a hospital kitchen.

## ACTIVITY

Describe in a sentence why a kitchen needs to be well organised.


A tidy and organised kitchen promotes efficiency and good hygiene

## Staffing hierarchy and good working relationships

Teamwork is essential to develop good working relationships and improve efficiency and productivity.

The organisation of the staffing hierarchy depends on the establishment. A large hotel or restaurant will have a head chef or executive head chef with one or two sous chefs, who deputise for the head chef. They may also run a department - for example, the pastry chef may also be the sectional chef, chef de partie and one of the sous chefs.

The chef de partie is in charge of a section such as sauces or vegetables. There may also be a demi chef de partie, who works on the opposite shift to the chef de partie. There will also be a number of assistant chefs (e.g. commis chefs), and there could be apprentices and trainees. The latter will move from section to section to complete their training.

Kitchen porters will also be employed, and in large establishments a kitchen clerk or personal assistant to the chef will be employed to assist with paperwork.

In other establishments, such as hospitals and centralised kitchens, a kitchen manager will take charge of the kitchen and have a number of cooks

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Head chef
\downarrow
Sous chef
\downarrow
Chef de partie (sectional chefs)
\downarrow
Commis chefs
\downarrow
Apprentices
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and kitchen assistants working under them. A centralised kitchen is one that serves a number of different outlets, and the food is transported to these outlets usually chilled or frozen. Each outlet will have a satellite or finishing kitchen where the food is finished and made ready to serve to the customer.

Today, kitchens are organised in many different ways but, in each case, a senior member of staff will be responsible for the smooth operation of the kitchen. This person must have leadership skills, human resource management skills and detailed product knowledge. In order to achieve an efficient and effective system that satisfies customers' needs, it is important to work as a team and develop good working relationships in the kitchen

|  |  |  |  |
| :--- | :--- | :--- | :--- |
| Sous Chef | Sous Chef | Sous Chef | Senior Pastry Chef |
| Chef de Partie | Chef de Partie | Chef de Partie | Pastry Chef |
| Sauce/meat | Fish/soup | Larder | Commis Chef |
| Demi Chef de Partie | Vegetables | Demi Chef de Partie | Apprentice |
| Commis Chefs | Demi Chef de Partie | Commis Chef | Porter |
| Apprentice | Commis Chef |  |  |
| Porter | Kitchen Assistants |  |  |

Example of a kitchen brigade for a 4-star deluxe hotel: 300 rooms, 1 fine-dining restaurant ( 50 covers), 1 brasserie restaurant (80 covers), banqueting (up to 200 covers)
and with the food service staff. This will also contribute to high staff morale and will improve the productivity of staff.


Example of a kitchen brigade for a 30-seater restaurant


Example of a kitchen brigade for a restaurant kitchen serving 60-80 meals a day


Example of a kitchen brigade for an industrial catering kitchen


Example of a kitchen brigade for the kitchen of a commercial hotel or restaurant

Head chef: has overall responsibility for the organisation and management of the kitchen, including staffing, training, menus, budget control and sourcing of food.
Sous chef: is the deputy to the head chef and would take overall responsibility in the head chef's absence. The sous chef may also have specific areas of responsibility, such as food safety, health and safety, quality control or training of staff.
Chef de partie: is in charge of a specific section within the kitchen, such as meat, vegetables or fish. There may be a demi chef de partie working on an opposite shift and covering days off. Commis chefs and apprentices usually work with these chefs in different sections.
Commis chef: is the junior chef in the kitchen and works under overall supervision of the sous chef. A commis chef will work around the various kitchen sections.
Apprentice: is similar to a commis chef and will complete similar tasks but is usually on a planned programme of learning, often managed by a college or training provider.

## ACTIVITY

1 How can the layout of the kitchen you work in be improved?
2 Think of a successful team. Say why you think it is successful and what you could learn from this team's success.

## Planning a kitchen

Different establishments will have different requirements for their kitchens. The most important factor to consider is the menu that is going to be offered, which will determine the amount of space and type of equipment you will need (known as operational requirements) in order to produce the food the customers are going to buy.

## Equipment and layout

Properly planned layouts with adequate equipment, tools and materials to do the job are essential if practical work is to be carried out efficiently. If equipment is in the right place then work will proceed smoothly and in the proper sequence, without back-tracking or criss-crossing. Work surfaces, sinks, stores and refrigerators should be within easy reach in order to avoid unnecessary walking.
Food deliveries should have a separate entrance because of the risk of contamination. It is also a good idea to have a separate staff entrance to the kitchen and, for food safety reasons, it is essential
to have separate changing facilities for employees wherever possible - they should not have to use customer facilities.

The layout of the preparation areas (for vegetables, meat, poultry, dairy products, etc.) is also important. In large catering establishments the preparation areas will be zoned to assist with the workflow. The flow of work through the kitchen and serving areas is essential to the smooth running of any operation. Where possible, the layout of the kitchen should focus on a linear workflow.
Effective workflow will:

- help to establish good communication between departments
- improve efficiency
- improve the quality of the finished product
- reduce the risk of accidents
- promote good health and safety and food safety,
all of which will provide a better service to customers.

Table 5.1 An example of a job description: senior sous chef

## Reporting to head chef

The senior sous chef position reports to the head chef and is responsible for the day-to-day kitchen operation, overseeing the stores, preparation and production areas. The position involves supervising and managing the kitchen staff, with direct responsibility for rostering and scheduling production. In the absence of the head chef, the senior sous chef will be required to take on the duties of the head chef and to attend senior management meetings in his or her absence.

## Duties

- Monitor and check stores operation
- Train new and existing staff in health and safety, HACCP (hazard analysis critical and control point), etc.
- Chair the Kitchen Health and Safety Committee
- Develop new menus and concepts together with senior management
- Schedule and maintain accurate records of staff absences
- Maintain accurate kitchen records
- Be responsible for the overall cleanliness of the kitchen operation
- Assist in the production of management reports
- Establish an effective and efficient team
- Assist with the overall establishment and monitoring of budget
- Roster all kitchen staff


## Conditions

- Grade 3 management spine
- Private health insurance
- Five-day week
- 20 days' holiday
- Profit-share scheme after one year's service


## Kitchen layout

## Remember:

- health and safety
- food safety
- time and motion (workflow).


## Personal specification: senior sous chef

## Qualifications

Level 3 /Level 4 qualification

## Experience

Five years' experience in four- and five-star hotel kitchens; restaurant and banqueting experience

## Skills

- Proficiency in culinary arts
- Microsoft Excel, Access, Word
- Operation of inventory control software
- Written and oral communication skills
- Team-building skills


## Knowledge

- Current health and safety legislation
- Food hygiene
- HACCP
- Risk assessment
- Production systems
- Current technology


## Other attributes

- Honesty
- Reliability
- Attention to detail
- Initiative
- Accuracy


## Essential

- Basic computer skills
- High degree of culinary skills
- Good communication skills
- Supervisory and leadership skills


## Desirable

- Knowledge of employment law
- Public relations profile


## Other factors to consider

Chefs and managers are often asked to assist in the design of food service systems. There are various factors that influence the planning and design of a kitchen, including:

- the size and extent of the menu and the market it serves
- services - gas, electricity and water
- labour - skill level of staff


Example of linear workflow

- amount of capital expenditure, costs
- use of prepared convenience foods
- types of equipment available
- hygiene and the Food Safety Acts and

Regulations (see Chapter 2)

- design and decor
- multi-usage requirements.


## The size and extent of the menu

If possible all designs should be market-led. Before a kitchen is planned, the management must know its goals and objectives - what it is aiming to achieve. In other words, what market is it aiming at (e.g. fine dining, gastro pub), what style of operation is it going to run (e.g. traditional, modern contemporary, silver service, plate service) and what type of food and prices will the customers expect? Management will have found out answers to these questions by carrying out market research, and this will determine the menu. They also need to know the number of customers they intend to cater for at each service.

## Services

The designer must know, when planning the layout of the kitchen, where the services (gas, electricity, water) are located. The designer must make sure that the layout of the kitchen uses the services in the most efficient way.

## Labour and skill level

How many and what kind of people does the company intend to employ? This will have an effect on the technology and equipment that is installed. For example, will they employ fewer, unspecialised staff and a lot of pre-prepared food, or more skilled people and a traditional partie system that makes dishes with entirely fresh ingredients. Whichever system they choose will affect the overall kitchen design.

## Amount of capital expenditure

There will be a detailed budget for most kitchen designs. It is not always possible, and is not a good idea, to design a kitchen and then worry about how much it will cost. The money available (the finance) will very often determine the overall design.

Because space is at a premium (property is expensive and the best use possible needs to be made of the space), kitchens are generally becoming smaller. Equipment is therefore being designed to cater for this trend, becoming more modular and streamlined and generally able to fit into less space. Equipment is also being designed to be easy to use, maintain and clean, because labour is a significant cost and the best use needs to be made of people's time.

## Use of prepared convenience foods

A kitchen preparing a fast-food menu using prepared convenience food will be planned and equipped very differently from an à la carte or cook-chill kitchen. Certain factors must be taken into consideration:

- Will sweets and pastries be made?
- Will there be a need for a larder or a butcher?
- Will fresh or frozen food be used, or a combination of both?


## Types of equipment available

The type, amount and size of the equipment will depend on the type of menu being provided. The equipment must be located in the right place. When planning a kitchen, standard symbols are used for the different equipment. A scale design can be produced on squared paper and these symbols can be included to show where each piece of equipment will be located. Hand-washing
facilities and storage of cleaning equipment should also be included. Computer-aided design (CAD) is now often used to do this.

Not only should the equipment be suitably situated, it should also be the right weight - it is important that it can be used without overtiring the user.

Kitchen equipment manufacturers and gas and electricity suppliers can provide technical details for equipment, such as output and size.

## ACTIVITY

List the four pieces of large equipment you would expect to find in most commercial kitchens.

## Hygiene and the Food Safety Act 1990/91/95

The design and construction of the kitchen must comply with the Food Safety Act 1990/91/95 and Food Hygiene Regulations 2006. The basic layout and construction should allow enough space for all food-handling areas, and associated areas for equipment. There should be enough room for the work to be carried out safely, and for frequent cleaning of the different areas and equipment.

## Design and decor

The trend towards providing more attractive eating places (which can be seen in particular in many of


The type and location of equipment should be considered when planning a kitchen
the chain and franchise operators), has also had an effect on kitchen planning and design. One trend has been to bring the kitchen area totally or partially into view, with back-bar equipment - for example, grills or griddles may be in full public view and food prepared on them to order.

Future trends in design and decor will be affected by:

- changes in technology
- social changes in eating habits
- lifestyle changes.

While there will be a continuing demand for the traditional heavy-duty type of equipment found in larger hotels and restaurant kitchens, the constant need to change and update the design and decor of modern restaurants means that the equipment's life is generally shorter - reduced perhaps from ten years to seven or five, or even less - to cope with the rate of change and redevelopment. This has resulted in the design of catering equipment generally being improved.

## Multi-usage requirements

The need for round-the-clock catering, such as in hospitals, factories where shift work takes place, the police and armed forces, has forced
kitchen planners to consider how kitchens can be used efficiently outside peak times. As a result, equipment is being made more adaptable and flexible, so that whole sections of the kitchen can be closed down when they are not in use, which means that savings can be made on heating, lighting and maintenance.

When planning a kitchen, it is important to consider the following:

- What type of customers do you want to attract?
- What type of food do you want to serve?
- Will your menu be à la carte, table d'hôte, a combination of both, or will it be self-service?
- Will you organise the kitchen based on the traditional partie system?
- Does the design comply with food safety law and health and safety regulations?
You must remember that whatever systems you choose, good communication between all departments in the kitchen and restaurant is important in order to improve efficiency.


## ACTIVITY

What is meant by good communication?

## Kitchen design

Kitchens must be designed so that they can be managed easily. Managers must have easy access to the areas under their control and must have a clear view of the areas they have to supervise. For reasons of efficiency and hygiene, large kitchens should have different working areas for different processes. The following factors must be taken into consideration:

- Product - how and where the different processes are carried out (raw materials to finished product), e.g. raw food should be prepared and stored in different areas from cooked food.
- Personnel - how people move within the kitchen, e.g. staff working in dirty areas (areas
of contamination) should not enter areas of finished product, or where blast-chilling is taking place.
- Containers/equipment/utensils - equipment should, where possible, be separated out into specific process areas, e.g. pastry equipment should not leave the pastry area, equipment and containers used for preparing and storing raw food should be washed and stored in the raw food area, chopping boards and other small equipment used for raw preparation should not be allowed to enter the cooking areas.
- Refuse - rubbish must be kept in an appropriate area and should not have to pass through other areas to get to its storage destination.


## Product and workflow

Each section should be subdivided into high-risk and contaminated sections.

- High-risk food which is likely to be contaminated easily while it is being prepared, e.g. ready-to-eat foods such as soups and sauces, cooked meat and desserts.
- Food that may be already contaminated when it arrives, before processing, e.g. unprepared vegetables, raw meat.
Back-tracking or crossover of materials and products must be avoided. Food preparation rooms should be planned so that the flow of work to process the food allows it to be moved through the premises, from the point of delivery to the point of sale or service, with the minimum of obstruction. The various processes should be separated as far as possible, and food intended for sale should not cross paths with waste food or refuse. Staff time is valuable, so a design that reduces wasteful journeys is efficient and cost-effective.

The overall sequence of receiving, storing, preparing, holding, serving and clearing should involve:

- minimum movement
- minimal back-tracking
- maximum use of space
maximum use of equipment with minimum time and effort.


## Working areas

A good receiving area needs to be designed for easy delivery of supplies. Storage facilities should be located nearby, in a suitable position for the food to be distributed to preparation and production areas.

The size and style of the menu and the ability of the staff will determine the number of preparation and production areas necessary and their layout. A straight-line layout would be suitable for a snack bar, while an island layout would be more suitable for a hotel restaurant.

Food safety must also be considered. There should be room to access all kitchen equipment so that it can be cleaned thoroughly, and there should be room for all used equipment from the dining area to be cleared, cleaned and stored. Still room facilities (e.g. for storing preserves and cakes) may also be required. Sufficient handwashing facilities for staff must also be provided

Kitchens can be divided into sections based on the process involved. For example:

- dry areas - for storage
wet areas - for fish preparation, vegetable preparation, butchery, cold preparation


Good kitchen design will consider the flow of the food through the preparation and service areas

- hot wet areas - for boiling, poaching, steaming; equipment needed will include atmospheric steamers, bratt pans, pressure steamers, steam jacketed boilers, combination oven
- hot dry areas - for frying, roasting, grilling; equipment needed will include cool zone fryers, salamanders, pressure fryers, induction cookers, bratt pans, halogen cookers, roasting ovens, microwave, charcoal grills, cook and hold ovens
- dirty areas - for refuse, pot wash areas, plate wash; equipment needed will include compactors, dishwashers, refuse storage units, glass washers, pot wash machines.


## Preparation areas

The various preparation processes require different areas depending on what food is involved. In a vegetable preparation area, water from the sinks and dirt from the vegetables are going to accumulate, so adequate facilities for drainage should be provided. Pastry preparation, on the other hand, involves mainly dry processes.

Whatever the processes, there are certain basic rules that can be applied to make working conditions easier and help to ensure that food hygiene regulations are complied with.
Proper design and layout of the preparation area can make a major contribution to good food
safety. Staff generally respond to good working conditions by taking more of a pride in themselves, in their work and in their working environment.

Adequate workspace must be provided for each process and every effort must be made to separate dirty and clean processes.
Vegetable preparation and wash-up areas should be separate from the actual food preparation and service areas. The layout must ensure a continuous workflow in one direction in order to avoid crossover of foods and cross-contamination. The staff should not get in each other's way by having to cross each other's paths more than is absolutely necessary.
Actual worktop areas should be big enough for the preparation processes that will be done on them, and should be designed so that the food handler has all the necessary equipment and utensils close to hand.

## The cooking area

Because 'raw materials' enter the cooking section from the main preparation areas (vegetables, meat and fish, dry goods), this section will be designed so that the flow movement continues through to the servery. So, for example, roasting ovens are best located close to the meat preparation area, and steamers next to the vegetable preparation area.


However, layout is not just a question of choosing and positioning equipment; it also depends on the management policy regarding the use of prepared foods and the operating cycle. Obviously the cooking area should not be used by other staff to cross to another section of the kitchen or to get to the service area. The layout should be planned so that raw foodstuffs arrive at one point, are processed in the cooking section and then despatched to the servery. There should be a distinct progression in one direction.

The operating cycle is the numbers of meals you are serving, which meal you are serving (breakfast, lunch or dinner) and the number of days a week you are open. So it is about the frequency of the operation.

As with other areas, the cooking section should be designed with a view to making maximum use of the available space with as little effort as possible.

## Maintenance and cleaning

Planning and equipping a kitchen is an expensive investment, so to avoid any action by the Environmental Health Officer, efficient, regular cleaning and maintenance is essential. (For example, the kitchens at the Dorchester hotel are swept during the day, given soap/detergent and water treatment after service, and any spillages cleaned up immediately. At night, contractors clean the ceilings, floors and walls.)
In most cases, throughout the industry, companies are trying to reduce labour costs while maintaining or enhancing the meal experience for the customer. Some trends that will affect the design of kitchens are as follows:

- Hotels: there is greater use of buffet and self-assisted service units.
- Banqueting: there is a move towards plated service, with less traditional silver service.
- Fast food: new concepts are coming onto the market, with more specialised chicken and seafood courts, more choices in ethnic food.
- Roadside provision: there is an increasing number of operations and partnerships with
service station companies. Basic grill menus are now enhanced by factory-produced à la carte items.
- Food courts: development has slowed down; there are minor changes all the time; most food courts offer an 'all day' menu. Restaurant Associates (Compass) are introducing food courts into hotels.
- Restaurants/hotels: there is less emphasis on luxury-end, five-star experience.
- Theme restaurants: will continue to improve and multiply.
- Hospitals: there is greater emphasis on bought-in freezer and chilled foods, meaning less on-site preparation and cooking. Some hospitals operate their own cook/chill or cook/ freeze systems. Many hospitals now have food courts occupied by well-known high street names as franchises, such as Pizza Hut or Burger King.
- Industrial: there are more zero-subsidy staff restaurants, increased self-service for all items. The introduction of cashless systems will enable multi-tenant office buildings to offer varying subsidy levels.
- Prisons and other institutions: little if any change; may follow hospitals by buying in more pre-prepared food; may receive foods from multi-outlet central production units, tied in with schools, meals-on-wheels provision, etc.
- University/colleges: greater move towards providing food courts; more snack bars and coffee shops. There is evidence of more small 'satellite' outlets around the buildings rather than large refectories or cafeterias.

Self-service is when the customers serve themselves from a self-service counter or buffet.
Self-assisted service is when there is someone on duty to help the customer choose and, in some cases, there will be a section on a buffet where a chef will be cooking fresh items such as stirfry, omelettes, waffles, pancakes. Here the guest is helped to choose and will take the finished item to their table. This is also known as theatre cookery.

Zero-subsidy: No financial contribution or benefit. A 'zero-subsidy' staff restaurant is one in which the business does not contribute to the costs of the staff restaurant to allow its staff to
purchase meals at a discounted rate. Instead, staff are expected to pay the full cost of anything they buy.

## Planning and preparing menus for catering operations

As you have already learned, planning the menu is one of the most essential elements in designing and costing the operations of a catering establishment.

## Evolution - the historical development of menus

Initially, menus were simply lists of food. Menus as we know them today came into use early in the nineteenth century, and courses began to be formulated. For special occasions as many as seven courses might be served, e.g. hors d'oeuvres, soup, fish, entrée, sorbet, roast, sweet, savoury.

With the formulation of menus, artistry and flair began to influence the various ways of cooking, and dishes were created after 'the style of' (e.g. à la Française) and/or given the names of important people for whom they had been created (e.g. peach Melba, a simple dish of poached fresh peach, vanilla ice cream and fresh raspberry purée created by Escoffier at the Savoy for Dame Nellie Melba, the famous opera singer).

As the twentieth century advanced, and people travelled more and settled around the world, styles of food and service from a wide variety of nations began to be introduced, resulting in the large number of ethnic dishes and ethnic restaurants that abound today.

Rapid air transport made it possible for foods from all corners of the globe to be available which, together with domestic and European produce, gives those who compose menus a tremendous range of choice.

Eating at work, at school, in hospitals and institutions led to a need for healthy, budgetconscious food.

## The importance of the menu (a means of communication)

Essential considerations prior to planning a menu are:

- Competition: be aware of any competition in the locality, including prices and quality. It may be wiser to produce a menu that is quite different from those of competitors.
- Location: study the area in which your establishment is situated and the potential target market of customers.
- Analysis: analyse the type of people you are planning to cater for (e.g. office workers in the city requiring quick service or holidaymakers in a seaside resort).
- Outdoor catering: are there opportunities for outdoor catering or takeaway food?
- Estimated customer spend per head: this is important when catering, for example, for hospital staff and patients, children in schools, workers in industry. Whatever level of catering, a golden rule should be 'offer value for money'.
- Modern trends in food fashions: these should be considered alongside popular traditional dishes.
- Range of dishes and pricing structure: decide what you are going to offer and at what price. Will you price each dish separately, or offer set two- or three-course menus? Or a combination of both?


## - Space and equipment in the kitchens:

this will influence the composition of the menu (e.g. avoiding overloading the deep fryer, salamanders or steamers).

## - Number and capability of staff:

 overstretched staff can easily reduce the standard of production envisaged and the quality of individual dishes.- Availability of supplies and reliability of suppliers: consider issues such as seasonal foods and storage space.
- Food allergies (see Chapter 4).
- Cost factor: these are crucial if an establishment is to be profitable. Costing is essential for the success of any menu. Modern computer techniques can analyse costs swiftly and on a daily basis.


## Types of menu

The main types of menu in use are:
Table d'hôte or set-price menu: a menu forming a meal, usually of two or three courses at a set price. A choice of dishes may be offered at all courses.

- À la carte: a menu with all the dishes individually priced. Customers can therefore compile their own menu, which may be one, two or more courses. A true à la carte dish should be cooked to order and the customer should be prepared to wait.
- Special party or function menus: menus for banquets or functions of all kinds.
- Ethnic or speciality menus: these can be set-price menus or with dishes individually priced, specialising in the food of a particular country (or religion) or in a specialised food itself, e.g. ethnic (Chinese, Indian, kosher, African-Caribbean, Greek), speciality (steak, fish, pasta, vegetarian, pancakes).
- Hospital menus: these usually take the form of a menu card given to the patient the day before service so that his or her preferences can be ticked. Both National Health Service and private hospitals cater for vegetarians and also for religious requirements.
- Menus for people at work: these vary in standard and extent from one employer to another due to company policy on the welfare of their staff and workforce. There may also
be a call-order à la carte selection charged at a higher price. The food will be varied with 'traditional' British and some ethnic and vegetarian dishes. Menus may consist of soup, main course with vegetables, followed by desserts and yoghurts. According to the policy of the management and employee requirements, there will very often be a salad bar and healthy-eating dishes included on the menu. Many companies now also serve breakfasts in their staff restaurants. When there is a captive clientele who face the same surroundings daily and meet the same people, then no matter how long the menu cycle or how pleasant the people, or how nice the decor, boredom is bound to set in and staff then long for a change of scene. So, a chef or manager needs to vary the menu constantly to encourage customers to patronise the establishment rather than going off the premises to eat. The decor and layout of the staff restaurant plays a very important part in satisfying the customer's needs. The facilities should be relaxing and comfortable so that he or she feels that the restaurant is not a continuation of the workplace. Employees who are happy, well nourished and know that the company has their interests and welfare at heart will tend to be well motivated and work better.
- Menus for children: in schools there is an emphasis on healthy eating and a balanced diet, particularly in boarding schools. Those areas with children of various cultural and religious backgrounds have appropriate items available on the menu. Many establishments provide special children's menus that concentrate on favourite foods and offer suitably sized portions.

Considerations when deciding which type of menu is appropriate:

- types of customers
- pricing
- staff available to produce and serve the menu
- waste control
- portion control.


Consider how many service staff are available

## Cyclical menus

These are menus that are compiled to cover a given period of time: one month, three months, etc. They consist of a number of set menus for a particular establishment, such as an industrial catering restaurant, cafeteria, canteen, directors' dining room, hospital or college refectory. At the end of each period the menu cycle starts again, thus overcoming the need to keep compiling new ones. The length of the cycle is determined by management policy, by the time of the year and by the different foods available. These menus must be monitored carefully to take account of changes in customer requirements and any variations in weather conditions that are likely to affect demand for certain dishes. If cyclical menus are designed to remain in operation for long periods of time, then they must be compiled carefully so that they do not have to be changed too drastically during operation.

## Advantages:

- Cyclical menus save time by removing the daily or weekly task of compiling menus, although they may require slight alterations for the next period.
- When used in association with cook-freeze operations, it is possible to produce the entire number of portions of each item to last the whole cycle, once it has been determined that the standardised recipes are correct.
- They give greater efficiency in time and labour.
- They can cut down on the number of commodities held in stock, and can assist in planning storage requirements.


## Disadvantages:

- When used in establishments with a captive clientele, the cycle has to be long enough for customers not to get bored with the repetition of dishes.
- The caterer cannot easily take advantage of 'good buys' offered by suppliers on a daily or weekly basis, unless such items are required for the cyclical menu.


## ACTIVITY

Design a cyclical menu for two weeks at a family holiday centre.

## Pre-planned and pre-designed menus

Before selecting the dishes that he or she prefers, the caterer should consider what the customer likes, and the effect of these dishes upon the meal as a whole.

## Advantages:

- Pre-planned or pre-designed menus enable the caterer to ensure that good menu planning is practised.
- Menus that are planned and costed in advance allow banqueting managers to quote prices instantly to a customer.
- Menus can be planned to take into account the availability of kitchen and service equipment, without placing unnecessary strain on it.
- The quality of food is likely to be higher if kitchen staff are preparing dishes they are familiar with and have prepared a number of times before.
- There is likely to be less waste.


## Disadvantages:

- Pre-planned and pre-designed menus may be too limited to appeal to a wide range of customers.
- They may reduce job satisfaction for staff who have to prepare the same menus repeatedly.
- They may limit the chef's creativity and originality.


## The structure of menus

## Length

The number of dishes on a menu should offer the customer an interesting and varied choice. In general, it is better to offer fewer dishes of good standard than a long list of mediocre quality.

## Design

This should complement the image of the dining room and be designed to allow for changes, which may be daily, weekly, monthly, etc. An insert for dishes of the day/week gives the customer added interest.

## Language

Accuracy in dish description helps the customer to identify the food they wish to choose. Avoid over-elaboration and using flowery words. Wherever possible, use English language. If a foreign dish name is used then follow it with a simple, clear English version.

## Factors to consider when planning a menu

## Presentation

Ensure that the menu is presented in a sensible and welcoming way so that the customer is put at ease and relaxed. An offhand, brusque presentation (written or oral) can be off-putting and lower expectations of the meal.

## Planning

Consider the following:

- type and size of establishment - pub, school, hospital, restaurant, etc.
- customer profile - different kinds of people have differing likes and dislikes
- special requirements - kosher, halal.
- time of the year - certain dishes acceptable in summer may not be so in winter
- foods in season - are usually in good supply and reasonable in price
- special days - Christmas, Shrove Tuesday, etc.
- time of day - breakfast, brunch, lunch, tea, high tea, dinner, supper, snack, special function
- price range - charge a fair price and ensure good value for money; customer satisfaction can lead to recommendation and repeat business
- number of courses
- sequence of courses
- use menu language that customers understand
- sensible nutritional balance
- no unnecessary repetition of ingredients
- no unnecessary repetition of flavours and colours
- be aware of the Trade Descriptions Act 1968 - 'Any person who in the course of a trade or business: applies a false trade description to any goods or supplies or offers to supply any goods to which a false trade description is applied shall be guilty of an offence.'

Mediocre: Only of average, or middling quality; not very good.
Brusque: Abrupt, rude or rough.

## Consumer protection

There is a whole range of laws concerned with consumer protection. Some are concerned with health and safety, and some are concerned with economic protection.

Fundamentally, however, all consumer protection starts with the basic contractor. If a supplier does not supply what a consumer has contracted to purchase (e.g. if a menu says that something is 'fresh' or 'free range', if the customer is served something that is not 'fresh' or 'free range'), the supplier may be in breach of contract. However, breach of contract cases can be difficult to prove.

## ACTIVITY

Suggest two types of menu that reflect religious beliefs.

## Breakfast menus

Breakfast menus can be compiled from the following foods and can be offered as continental, table d'hôte, à la carte or buffet. For buffet service customers can self-serve the main items they require with assistance from counter hands. Ideally, eggs should be freshly cooked to order.

- Fruits, fruit juices, stewed fruit, yoghurts, cereals (porridge, etc.
- Eggs: fried, boiled, poached, scrambled; omelettes with bacon or tomatoes, mushrooms or sauté potatoes.
- Fish: kippers, smoked haddock, kedgeree.
- Meats (hot): fried or grilled bacon, sausages, kidneys, with tomatoes, mushrooms or sauté potatoes, potato cakes.
- Meats (cold): ham, bacon, pressed beef with sauté potatoes.
- Preserves: marmalade (orange, lemon, grapefruit, ginger), jams, honey.
- Beverages: tea, coffee, chocolate.
- Bread: rolls, croissants, brioche, toast, pancakes, waffles.

Points to consider when compiling a breakfast menu:

- It is usual to offer three of the courses previously mentioned: fruit, yoghurt or cereals; fish, eggs or meat; preserves, bread, coffee or tea.
- As large a choice as possible should be offered, depending on the size of the establishment, bearing in mind that it is better to offer a smaller number of well-prepared dishes than a large number of hurriedly prepared ones.
- A choice of plain foods, such as boiled eggs or poached haddock, should be available for people who may not require a fried breakfast.
- Buffet breakfast offers a choice of as many breakfast foods as is both practical and economic. It can be planned on a self-service basis or part self-service and assisted service (e.g. hot drinks and freshly cooked eggs prepared to order).


Sample continental, English and à la carte breakfast menu

## Luncheon and dinner menus

Types of menu:

- A set-price one-, two- or three-course menu, ideally with a choice at each course.
- A list of well-varied dishes, each priced individually so that the customer can make up his or her own menu of whatever number of dishes they require.
- Buffet, which may be all cold or hot dishes, or a combination of both, either to be served or organised on a self-service basis. Depending on the time of year and location, barbecue dishes can be considered.
- Special party, which may be either: set menu with no choice; set menu with a limited choice, such as soup or melon, main course, choice of two sweets; served or self-service buffet.


## Tea menus

These vary considerably, depending on the type of establishment, and could include, for example:

- assorted sandwiches
- bread and butter (white, brown, fruit loaf)
- assorted jams
- scones with clotted cream, pastries, gâteaux - tea (Indian, China, iced, fruit, herb).


A buffet table at a function

Commercial hotels, tea rooms, public restaurants and staff dining rooms may offer simple snacks, cooked meals and high teas. For example:

- assorted sandwiches
- buttered buns, scones, cakes, Scotch pancakes, waffles, sausage rolls, assorted bread and butter, various jams, toasted teacakes, scones, crumpets, buns
- eggs (boiled, poached, fried, omelettes)
- fried fish, grilled meats, roast poultry
- cold meats and salads
- assorted pastries, gâteaux
- various ices, coupes, sundaes
- tea, orange and lemon squash.


## Light buffets (including cocktail parties)

Light buffets can include:

- hot savoury pastry patties of, for example, lobster, chicken, crab, salmon, mushrooms, ham
- hot chipolatas; chicken livers, wrapped in bacon and skewered
- bite-sized items - quiche and pizza; hamburgers; meatballs with savoury sauce or dip; scampi or fried fish goujons with tartare sauce
- savoury finger toast to include any of the cold canapés; these may also be prepared on biscuits or shaped pieces of pastry
- game chips, gaufrette potatoes, fried fish balls, celery stalks spread with cheese
- sandwiches; bridge rolls, open or closed but always small
- fresh dates stuffed with cream cheese; crudités with mayonnaise and cardamom dip; tuna and chive catherine wheels; crab claws with garlic dip; smoked salmon pin wheels; choux puffs with Camembert
- sweets (e.g. trifles, charlottes, bavarois, fruit salad, gâteaux).

For fork buffets, all food must be prepared in a way that enables it to be eaten with a fork or spoon.

## Fast-food menus

Although some people are scornful of the items on this type of menu, calling them 'junk food', nevertheless their popularity and success is proven by the fact that, starting with the original McDonald's, which opened in Chicago in 1955, there are now many thousands of outlets worldwide. McDonald's offers customers a nutrition guide to its products, as well as information for diabetes sufferers.

There are now many more well-known fast-food brands operating successfully in the UK.

## Banquet menus

Banquets often serve a set menu of three or more courses, often to large numbers of people.
When compiling banquet menus, consider the following points:

- The food, which will possibly be for a large number of people, must be dressed in such a way that it can be served fairly quickly. Heavily garnished dishes should be avoided.
- If a large number of dishes have to be dressed at the same time, certain foods deteriorate
quickly and will not stand storage, even for a short time, in a hot place.

A normal menu is used, bearing in mind the number of people involved. It is not usual to serve farinaceous (e.g. pasta, noodles, rice) dishes, eggs, stews or savouries. A luncheon menu could be drawn from the following and would usually consist of three courses. Dinner menus, depending on the occasion, generally consist of three to five courses.

- First course: soup, cocktail (fruit or shellfish), hors d'oeuvres (assorted or single item), a small salad.
- Second course: fish, usually poached, steamed, roasted or grilled fillets with a sauce.
- Third course: meat, poultry or game, hot or cold, but not a stew or made-up dish; vegetables and potatoes or a salad would be served.
- Fourth course: if the function is being held during the asparagus season, then either hot or cold asparagus with a suitable sauce may be served as a course on its own.
- Fifth course: sweet, hot or cold, and/or cheese and biscuits.


## Food purchasing

Once a menu is planned, a number of activities must occur to bring it into reality. One of the first and most important stages is to purchase and receive the required materials. Skilful purchasing with good receiving can help to make the best of a good menu. There are six important steps to remember:

1. Know the market.
2. Design the purchase procedures.
3. Determine purchasing needs.
4. Receive and check the goods.
5. Establish and use specifications.
6. Evaluate the purchasing task.

## Knowing the market

Since markets vary considerably, to do a good job of purchasing a buyer must know the characteristics of each market.

A market is a place where buying and selling takes place. This could be done using the telephone, on a street corner, in a retail or wholesale establishment, or at an auction.

It is important that a food and beverage purchaser knows certain things about the items they plan to buy, such as:

- where they are grown
- seasons of production
- approximate costs
- conditions of supply and demand
- laws and regulations governing the market and the products
- marketing agents and their services
- processing
- storage requirements
- commodity and product, class and grade.


## The buyer

This is the key person who makes decisions regarding quality, amounts, price and what will satisfy the customers but also make a profit. The wisdom of the buyer's decisions will be reflected in the success or failure of the operation. The buyer must not only be knowledgeable about the products, but must have the necessary skills to deal with sales people, suppliers and other market agents. The buyer must be prepared for hard and often aggressive negotiations.

The responsibility for buying varies from company to company according to size and management policy. Buying may be the responsibility of the chef, manager, storekeeper, buyer or buying department.

A buyer must have knowledge of the internal organisation of the company, especially the operational needs, and be able to obtain the products needed at a competitive price. Buyers must also acquaint themselves with the procedures of production and how these items are going to be used in the production operations (how they are going to be prepared and cooked), in order that the right item is purchased. For example, the item required may not always have to be of prime quality, e.g. tomatoes for use in soups and sauces.

A buyer must also be able to make good use of market conditions. For example, if there is a glut of fresh salmon at low cost, has the organisation the facility to make use of extra salmon purchases? Is there sufficient freezer space? Can the chef make use of salmon by creating a demand on the menu?

## ACTIVITY

What qualities does a buyer have to have in order to be successful?

## Buying methods

These depend on the type of market and the kind of operation. Purchasing procedures can be formal or informal. Both have advantages and disadvantages.

Informal buying usually involves oral negotiations, talking directly to sales people, face to face or using the telephone. Informal methods are suitable for casual buying, where the amount involved is not large, and speed and simplicity are desirable. They vary according to market conditions - prices and supply tend to fluctuate more than with formal methods.

- Formal buying, known as competitive buying, involves giving suppliers written specifications quantity needed. Negotiations are normally written. Formal contracts are best for large quantities purchased over a long period of time; prices do not vary much during a year once the basic price has been established.


## Selecting suppliers

Selecting suppliers is an important part of the purchasing process. First, think about how a supplier will be able to meet the needs of your operation. Consider:

- price
- delivery
- quality/standards.

Information on suppliers can be obtained from other purchasers. Visits to suppliers' establishments are to be encouraged. When interviewing prospective suppliers, you need to question how reliable a supplier will be under competition and how stable under varying market conditions.

## Principles of purchasing

A menu dictates what an operation needs. Based on this, the buyer searches for a market that can supply these requirements. Once the right market is found, the buyer must investigate the various products available. The right product must be obtained - it must be suitable for the item or dish required and of the quality desired by the establishment. Other factors that might affect production needs include:

- type and image of the establishment
- style of operation and system of service
- occasion for which the item is needed
- amount of storage available (dry, refrigerated or frozen)
- finance available and supply policies of the organisation
- availability, seasonality, price trends and supply.

The skill of the employees, catering assistants and chefs must also be taken into account, as well as condition and the processing method and the storage life of the product.

## Three types of product

The main products that an establishment purchases can be divided into three types:

1. Perishable: products that do not stay fresh for very long, such as fresh fruit and vegetables, dairy products, meat and fish; prices and suppliers may vary; informal methods of buying are frequently used; perishables should be purchased to meet menu needs for a short period only.
2. Staple: supplies that are canned, bottled, dehydrated or frozen; formal or informal purchasing may be used; because items are staple and can be stored easily, bid buying is frequently used to take advantage of the favourable prices available when purchasing large quantities.
3. Daily use needs: daily use or contract items are delivered frequently to match usage; stocks are kept up to the particular level and supply is automatic; supplies may arrive daily, several
times a week, weekly or less often; most items are perishable, therefore supplies must not be excessive but only sufficient to get through to the next delivery.

## Buying tips

The following is a list of suggestions to assist the buyer.

- Learn about all commodities, both fresh and convenience, to be purchased. Keep your knowledge up to date.
- Be aware of the different types and qualities of each commodity that is available.
- When buying fresh commodities, be aware of part-prepared and ready-prepared items available on the market.
- Keep a sharp eye on price variations. Buy at the best price that will ensure the required quality and also make a profit. The cheapest item may prove to be the most expensive if lots of it ends up being wasted. When possible, order by number and weight. For example, 20 kg plaice could be $80 \times 250 \mathrm{~g}$ plaice, $40 \times 500 \mathrm{~g}$ plaice, $20 \times$ 1 kg plaice. It could also be 20 kg total weight of various sizes, which makes it difficult to control portion sizes. Some suppliers (e.g. butchers, fishmongers) may offer a portion-control service by selling the required number of a given weight of certain cuts, for example, $100 \times 150 \mathrm{~g}$ sirloin steaks, 25 kg prepared stewing beef, $200 \times$ 100 g pieces of turbot fillet, $500 \times 100 \mathrm{~g}$ plaice fillets.
- Organise an efficient system of ordering, keeping copies of all orders for cross-checking, whether orders are given in writing, in person or by telephone.
- Compare purchasing by retail, wholesale and contract procedures to ensure the best method is selected for your particular organisation.
- Explore all possible suppliers: local or markets, town or country, small or large.
- Keep the number of suppliers to a minimum. At the same time, have at least two suppliers for every group of commodities, when possible. This should help to keep the suppliers' prices and terms competitive.
- Issue all orders to suppliers fairly, allowing enough time for the order to be delivered on time.
- Request price lists as often as possible and compare prices continually to make sure that you buy at a good market price.
- Buy perishable goods when they are in full season as this gives the best value at the cheapest price. To help with purchasing the correct quantities, it is useful to compile a purchasing chart for 100 covers from which items can be divided or multiplied according to requirement. An indication of quality standards can also be incorporated in a chart of this kind.
- Deliveries must all be checked against the orders given, for quantity, quality and price. If any goods delivered are below an acceptable standard they must be returned, either for replacement or credit.
- Containers can account for large sums of money. Ensure that all containers are correctly stored, returned to the suppliers where possible and the proper credit given.
- All invoices must be checked for quantities and prices.
- All statements must be checked against invoices and passed swiftly to the office so that payment can be made on time, to ensure maximum discount on purchases.
- Develop good relations with trade representatives (sales people) because much useful up-to-date information can be gained from them.
- Keep up-to-date trade catalogues, visit trade exhibitions, survey new equipment and continually review the space, services and systems in use. Always be on the lookout for ways to increase efficiency.
- Organise a testing panel occasionally to keep up to date with new commodities and new products coming on to the market.
- Consider how computer applications might help the operation.
- Study weekly fresh food price lists.

The people on a testing panel look at the quality of the produce, the potential portion control and yield, and will taste the products for flavour.

Yield: What is produced or generated. In a restaurant this may refer to how many portions or what size of portion can be made from a certain quantity of produce.

## Portion control - controlling waste and costs

Portion control means controlling the size or quantity of food served to each customer. The amount of food allowed depends on the three following considerations.

## 1. The type of customer or establishment:

there will obviously be a difference in the size of portions served, such as to those working in heavy industry or to female clerical workers. In a restaurant offering a three-course table d'hôte menu for $£ X$, including salmon, the size of the portion would naturally be smaller than in a luxury restaurant charging $£ \mathrm{X}$ for the salmon on an à la carte menu.
2. The quality of the food: better-quality food usually yields a greater number of portions than poor-quality food: low-quality stewing beef often needs so much trimming that it is difficult to get six portions to the kilogramme, and the time and labour involved also loses money. On the other hand, good-quality stewing beef will often give eight portions to the kilo, with much less time and labour required for preparation, and more customer satisfaction.
3. The buying price of the food: this should correspond to the quality of the food if the person responsible for buying has bought
wisely. A good buyer will ensure that the price paid for any item of food is equivalent to the quality - in other words, a good price should mean good quality, which should mean a good yield, and so help to establish sound portion control. If, on the other hand, an inefficient buyer has paid a high price for food of indifferent quality then it will be difficult to get a fair number of portions, the selling price necessary to make the required profit will be too high and customer satisfaction can be affected.

Portion control should be closely linked with the buying of the food; without a good knowledge of the food bought it is difficult to state fairly how many portions should be obtained from it. To develop a sound system of portion control, each establishment (or type of establishment) needs individual consideration. A golden rule should be: 'a fair portion for a fair price'.
Conveniently portioned items are available, such as individual sachets of sugar, jams, sauce, salt and pepper, individual cartons of milk and cream, and individual butter and margarine portions. These make planning easier and create less waste but are expensive compared to non-portioned commodities.

## Standard purchasing specifications

Standard purchasing specifications are drawn up for every item to be purchased, describing exactly what is required. It includes various criteria related to quality, grade, weight, size and method of preparation, if required (such as washed and selected potatoes for baking). Other information might include variety, maturity, age, colour, shape and so on.

Once an accurate specification is approved, it will be referred to every time the item is delivered. A copy is often given to the supplier and the storekeeper, who then know exactly what is needed.

These purchasing specifications (known as primary specifications) will help with the formulation of standardised recipes and assist in the costing and control procedures. Commodities that can be specified include the following:

- grown (primary): butcher's meat; fresh fish; fresh fruit and vegetables; milk and eggs
- manufactured (secondary): bakery goods; dairy products
- processed (tertiary): frozen foods including meat, fish and fruit and vegetables; dried goods; canned goods.
So, any food product can have a specification attached to it. However, the primary specifications focus on raw materials, ensuring that they are of the required quality. Without good quality raw materials, secondary or tertiary specifications are useless. For example, to specify a frozen apple pie, this product would use:
- a primary specification for the apple
- a secondary specification for the pastry
- a tertiary specification for the process (freezing).

But, no matter how good the secondary or tertiary specifications, if the apples used in the beginning are not of a very high quality, the whole product will not be of a good quality.

## Example of a standard purchasing specification for tomatoes

- Commodity: round tomatoes.
- Size: 50 g (2oz) 47-57 mm diameter.
- Quality: firm, well formed, good red colour, with stalk attached.
- Origin: Dutch, available March-November.
- Class/grade: super class A.
- Weight: $6 \mathrm{~kg}(13 \mathrm{lb})$ net per box.
- Count: 90-100 per box.
- Quote: per box/tray.
- Packaging: loose in wooden tray, covered in plastic.
- Delivery: day following order.
- Storage: temperature $10-13^{\circ} \mathrm{C}\left(50-55^{\circ} \mathrm{F}\right)$ at a relative humidity of 75-80\%.
Note: avoid storage with cucumbers and aubergines.

For most perishable items, a daily or monthly quotation system is more common than entering
into a long-term contract. This is essentially a short-term contract that is regularly reviewed to ensure that a competitive situation is maintained.

## The standard recipe

The standard recipe is a written formula for producing a food item of a specified quality and quantity for use in a particular establishment. It should show the precise quantities and qualities of the ingredients, together with the sequence of preparation and service. It enables the establishment to have greater control over cost and quantity.

The objective of a standard recipe is to predetermine the following:

- the quantities and qualities of ingredients to be used, stating the purchase specification
- the amount (number of portions) a recipe should make.


## Accurate weighing and measuring

It is important that, when designing standardised recipes, the correct weights and measures are recorded, to achieve consistency, so no matter who prepares the dish the same standard portion size and quality is achieved.

Each recipe should tell you the following:

- the ingredients to be used
- the exact amounts of ingredients required
- how the dish is prepared
- how the dish is cooked
- the number of portions it will produce (yield).

Always read through the recipe carefully and check that you:

1. have the right ingredients and equipment
2. have the correct weights
3. have enough time to prepare the dish.

To facilitate menu planning, purchasing and internal requisitioning, food preparation and production, and portion control:

- know the food cost per portion
- know the nutritional value of a particular dish.

The standard recipe will also help new staff in the preparation and production of standard products, which can be made easier by using photographs or drawings illustrating the finished product.

## Cost control

It is important to know the exact cost of each process and every item produced, so a system of cost analysis and cost information is essential.

Cost analysis: The process of breaking down the costs of an operation into all its separate parts so that it is possible to look at the exact cost of each process and every item produced, and judge the efficiency and cost effectiveness of each.

The advantages of an efficient costing system are as follows.

- It tells you the net profit made by each section of the organisation and shows the cost of each meal produced.
- It will reveal possible ways to economise and can result in a more effective use of stores, labour, materials, and so on.
- Costing provides the information necessary to develop a sound pricing policy.
- Cost records help to provide speedy quotations for all special functions, such as parties, wedding receptions, and so on.
- It enables the caterer to keep to a budget.

No one costing system will automatically suit every catering business, but the following guidelines may be helpful.

- The cooperation of all departments is essential.
- The costing system should be adapted to


Labour means the cost of employing staff
the business, not vice versa. If the accepted procedure in an establishment is altered to fit a costing system then there is danger of causing resentment among staff and as a result losing their cooperation.

- Clear instructions in writing must be given to staff who are required to keep records.

The system must be made as simple as possible so that the amount of clerical work required is kept to a minimum. An efficient mechanical calculator or computer should be provided to save time and effort.

To calculate the total cost of any one item or meal provided it is necessary to analyse the total expenditure under several headings. Basically the total cost of each item consists of the following three main elements.

1. Food and materials costs: these are known as variable costs because the level will vary according to the volume of business. In an operation that uses part-time or extra staff for special occasions, the money paid to these staff also comes under variable costs; by comparison, salaries and wages paid regularly to permanent staff are fixed costs.
2. Labour costs and overheads: regular charges come under the heading of fixed costs, which include labour and overheads. Labour costs in the majority of operations fall into two categories:

- direct labour cost, which is salaries and wages paid to staff such as chefs, waiters, bar
staff, housekeepers, chambermaids, which can be allocated to income from food, drink and accommodation sales
- indirect labour cost, which would include salaries and wages paid, for example, to managers, office staff and maintenance staff who work for all departments (so their labour cost should be charged to all departments).
Overheads consist of rent, rates, heating, lighting and equipment.

3. Cleaning materials: this is an important group of essential items that is often overlooked when costing. There are over 60 different items that come under this heading, and approximately 24 of these may be required for an average catering establishment. These may include: brooms, brushes, buckets, cloths, drain rods, dusters, mops, sponges, squeegees, scrubbing/polishing machines, suction/vacuum cleaners, wet and wet/dry suction cleaners, scouring pads, detergents, disinfectants, dustbin powder, washing-up liquids, fly sprays, sacks, scourers, steel wool, soap, soda, and so on. It is important to understand the cost of these materials and to ensure that an allowance is made for them under the heading of 'overheads'.

## Overheads:

## Maintenance

Gas
Electricity
Sundry expenses

## Gross profit

Gross profit (or kitchen profit) is the difference between the cost of an item and the price it is sold at. If gross profit is set as a fixed percentage mark-up, the food cost of each dish is calculated and a fixed gross profit (e.g. 100 per cent) is added. So, if the food costs $£ 2$ it is sold for $£ 4$. It is usual to express each element of cost as a percentage of the selling price. This enables the caterer to control profits.

## Net profit

Net profit is the difference between the selling price of the food (sales) and total cost of the product (food, labour and overheads). This box shows an example:

If the selling price of a dish is expressed as 100\% (the total amount received from its sale), it can be broken down into the amount of money spent on food items and the gross profit. This can be expressed in percentages as shown below.


```
Sales - food cost = gross profit (kitchen profit)
Sales - total cost = net profit
Food cost + gross profit = sales
Example Food sales for 1 week = £25,000
    Food cost for 1 week=£12,000
    Labour and overheads for 1 week = £9,000
    Total costs for 1 week = £21,000
    Gross profit (kitchen profit)=£13,000
    Net profit = £4,000
Food sales - food cost }£25,000-£12,000=£13,000 (gross profit
Food sales - net profit }£25,000-£4,000=£21,000 (total costs
Food cost + gross profit £12,000 + £15,000 = £25,000 (food sales)
Profit is always expressed as a percentage of the selling price.
Therefore the percentage profit for the week is:
Net profit - sales }\times100=£4000\times100\div25,000=16
```

A breakdown reveals the figures shown in Table
5.2.

Table 5.2 Example breakdown

|  | Costs | Percentage of sales (\%) |
| :--- | :--- | :--- |
| Food cost | $£ 12,000$ | 44 |
| Labour | $£ 6,000$ | 25 |
| Overheads | $£ 3,000$ | 18 |
| Total costs | $£ 21,000$ |  |
| Sales | $£ 25,000$ |  |
| Net profit | $£ 4,000$ | 13 |

This can also be presented in monetary terms, as shown in the following diagram, if the dish was sold at $£ 10.00$, for example.


## Calculating the selling price

If food costs come to $£ 3.50$, to calculate the selling price on the basis of a $65 \%$ gross profit, the following calculation can be used.
$\frac{3.50 \text { (food costs) }}{35 \text { (food cost as a } \% \text { of the sale) }} \times 100=£ 10.00$
This calculation brings the food cost to $1 \%$ of the selling price before multiplying by 100 to bring the selling price to $100 \%$.

To demonstrate this further, if the gross profit requirement was raised to $75 \%$, this would reduce the food cost as a percentage of the selling price to $25 \%$. Therefore the selling price would have to be higher if the food cost remained at $£ 3.50$.
$\frac{3.50 \text { (food costs) }}{25 \text { (food cost as a } \% \text { of the sale) }} \times 100=£ 14.00$


The percentages still add up to $100 \%$, but the proportion spent on food is smaller in terms of the selling price. The diagrams illustrate the breakdown on this basis.


To check that this is correct, the following calculation can be applied.
$\frac{14.00 \text { (selling price) }}{100 \text { (brings } 14.00 \text { down to } 1 \%)} \times 25=£ 13.50$
(brings up to 25\%)
.... and
$\frac{14.00 \text { (selling price) }}{100 \text { (brings } 14.00 \text { down to } 1 \%)} \times 75=£ 10.50$
(brings up to 75\%)
$£ 11.50(75 \%)+£ 3.50(25 \%)=£ 14.00(100 \%)$
If the restaurant served 1000 meals then the average amount spent by each customer would be:
$\frac{\text { Total sales } £ 25,000}{\text { Number of customers } 1000}=£ 25.00$
As the percentage composition of sales for a month is now known, the average price of a meal for that period can be further analysed:
Average price of a meal $=£ 25.00=100 \%$

$$
25 p=1 \%
$$

which means that the customer's contribution towards:

| Food cost | $=25 \times 48=£ 12.00$ |
| :--- | :--- |
| Labour | $=25 \times 24=£ 6.00$ |
| Overheads | $=25 \times 12=£ 3.00$ |
| Net profit | $=25 \times 16=£ 4.00$ |
| Average price of meal | $=£ 25.00$ |

A rule that can be applied to calculate the food cost price of a dish is: let the cost price of the dish equal 40 per cent and fix the selling price at 100 per cent.

Cost of dish $=400 p=40 \%$
Selling price $=400 \times 100 \div 40=£ 10.00$
Selling the dish at $£ 10$, making 60 per cent gross profit above the cost price, would be known as 40 per cent food cost. For example:
Sirloin steak ( 250 g )
250 g entrecote steak at $£ 10.00 \mathrm{akg}=£ 2.50$
To fix the selling price at $40 \%$ food cost $=$ $2.50 \times 100 \div 40=£ 6.25$

If food costing is controlled accurately, the food cost of particular items on the menu and the total expenditure on food over a given period can be worked out. Finding the food costs helps to control costs, prices and profits.

An efficient food cost system will show up any bad buying and inefficient storing, and should help to prevent waste and pilfering. This can help the caterer to run an efficient business, and enable her or him to give the customer value for money.
The caterer who gives the customer value for money together with the desired type of food is well on the way to being successful.

## Example

If a dish costs $£ 2.80$ to produce, what should its selling price be to achieve 60 per cent profit on sales?
Gross profit 60\%, food costs 40\%
Selling price $\quad=\frac{£ 2.80 \times 100}{40}$

$$
=£ 7.00
$$

Add VAT $(£ 7.00 \times 0.20)+£ 1.40$
Final selling price $\quad=£ 8.40$

## Example

If a dish costs $£ 2.80$ to produce, what should its selling price be to make a 200 per cent profit on cost?

Gross profit 200\%, food costs 100\%
Cost price $=\frac{£ 2.80 \times(200+100)}{100}$
Add VAT $(£ 8.40 \times 0.20)+£ 1.68$
Final selling price $=£ 8.88$

## ACTIVITY

If a dish costs $£ 3.00$ to produce, what should the selling price be to achieve a 70 per cent profit on sales?


Table 5.3 Food costings

| Food cost (\%) | To find the selling <br> price multiply the <br> cost price of the <br> food by: | If the cost price <br> of food is \&4, the <br> selling price is: | If the cost price is <br> £1.20, the selling <br> price is: | Gross profit (\%) |
| :--- | :--- | :--- | :--- | :--- |
| 60 | 1.66 | $£ 6.64$ | $£ 1.92$ | 40 |
| 55 | 1.75 | $£ 7.00$ | $£ 2.04$ | 45 |
| 50 | 2 | $£ 8.00$ | $£ 2.40$ | 50 |
| 45 | 2.22 | $£ 8.88$ | $£ 2.64$ | 55 |
| 40 | 2.5 | $£ 10.00$ | $£ 2.88$ | 60 |
| 33.3 | 3 | $£ 12.00$ | $£ 3.60$ | 66.6 |

## Food costs and operational control

As food is expensive, efficient stock control levels are essential to help the profitability of the business. The main difficulties of controlling food are as follows.

- Food prices fluctuate frequently because of inflation and falls in demand and supply, through poor harvests, bad weather conditions, and so on.
- Transport costs rise due to wage demands and the cost of petrol and diesel.
- Fuel costs rise, which affects food companies' and producers' costs.
- Any food subsidies imposed by governments could be removed.
- Changes occur in the amount demanded by the customer; increased advertising increases demand; changes in taste and fashion influence demand from one product to another.

Media focus on certain products that are labelled healthy or unhealthy will affect demand, e.g. butter being high in saturated fats, sunflower margarine being high in polyunsaturates. TV cookery programmes and celebrity chefs can make certain dishes and ingredients more popular.

Changes in operational control may also be seen with the increasing emphasis on food traceability, local sourcing and reduction in food miles.

Each establishment should devise its own control system to suit its own needs. Factors that affect a control system are:

- regular changes in the menu
- menus with a large number of dishes
- dishes with a large number of ingredients
- problems in assessing customer demand
- difficulties in not adhering to or operating standardised recipes
- raw materials purchased incorrectly.

Factors assisting a control system include:

- menu remains constant (e.g. McDonald's, Harvester, Pizza Hut, Burger King)

- standardised recipes and purchasing specifications are used
- menu has a limited number of dishes.

Stocktaking is therefore easier and costing is more accurate.

In order to carry out a control system, food stocks must be secure, refrigerators and deep freezers should be kept locked, portion control must be accurate. A book-keeping system must be developed to monitor the daily operation.

## Test yourself

1 In the nineteenth century, who devised the system of kitchen organisation referred to as the 'partie' system?
2 What is the usual role of a chef de partie? Give examples.
3 Suggest three considerations you would need to make when planning a kitchen.
4 Why is good kitchen workflow considered to be very important?
5 When planning a menu for a new city centre restaurant, suggest four considerations that need to be made.
6 When a menu is described as table d'hote what does this mean?
7 In relation to food, what is formal/competitive buying?
8 Describe what is meant by 'portion control' and give three examples of how this may be done.
9 Give an example of 'variable costs' in a hospitality business.
10 What is the name given to the profit made by a business after all the costs such as food, labour and overheads have been taken out?

