

NATIONAL OPEN UNIVERSITY OF NIGERIA

HCM 303



**Food Service and
Professionalism**
Module 4

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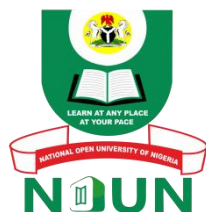
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Module 4

Unit I Types of Catering Service: Fish and Sea Foods

1.0 Introduction

This unit deals with fish and sea foods. In the last unit, we discussed about garnishing, stuffing etc in game poultry. It is not every human being that likes eating meat or poultry game. Some prefer fish and sea foods. Fish and sea foods also have its own delicacy so, it is very important that you know the types and how to prepare it.

2.0 Objectives

At the end of this unit, you should be able to:

- understand know how to classify fish and sea foods
- understand how to clean, preserve and store fish and sea foods
- understand the food value and effect of cooking fish
- understand how to cook and present various kinds of fishes and sea foods
- explain how to fillet fish
- understand how to cut fish
- explain the characteristics of fish.

3.0 Main Content

3.1 Fish and Sea Foods

There are great many varieties of fish and at one time they were profusely available. However, since the Second World War, there has been a great increase in fishing (partly to feed human directly and partly to feed animals reared for food), and thus has given rise to much concern about the dwindling of supplies of some varieties. Some countries have imposed fishing limits around their shores to regulate the amount of fish being caught. At sea, fish is gutted, cleaned and frozen on board special boats, before it reaches the shore, as it deteriorates very rapidly once caught.

3.1.1 Classification of Fish

Fish is classified according to origin i.e. fresh water fish e.g. salmon, trout, and sea water fish which is further divided into:

- **Pelagic Fish:** This type of fish swims near the surface e.g. herring, pilchard, mackerel.
- **Demurral Fish:** This type of fish swims near the bottom e.g. Plaice, Cod, hake.

Fish is also classified according to their fat content and type. These are:

- **Oily Fish:** Has more than 5% fat in their flesh, which is why they are quite dark.
Example are mackerel, herrings, sprat, sardine, salmon

- **White Fish:** Has less than 5% fat in their flesh which is liver. Examples are halibut, cod, whiting, Cooley, plaice, haddock, sole.

Shell fish: These are divided into:

- **Molluscs** – (small, soft-bodied sea animals which are covered by a hard protective (crust) or external skeleton). Examples are lobster, crab, shrimp.

3.1.2 Composition and Structure

Fish has a muscle composition similar to that of meat, but there is far less connective tissues. Therefore it is much easier to tenderize and quicker to cook. It is important not to overcook fish, as the protein easily becomes tough and the flesh dry.

The muscle is formed into flakes, which separate on cooking. Unlike meat, there is a lot of wastage with fish i.e. the bones, head, fins and often the skin. The only internal organ that is eaten is the roe of some species, where the eggs are found. Cod and herring roe are often eaten and the roe of the sturgeon fish is a prized delicacy and is very expensive.

3.2 Preservation of Fish

(1) Freezing: Fish is preserved either by being frozen at sea or as soon as possible after reaching the port. It should be thawed before cooking. Plaice, halibut, turbot, haddock, sole, cod, trout, salmon, whiting, scampi, smoked haddock and kippers are very good for freezing.

Frozen fish should be checked for:

- (i) No evidence of freezer burn
- (ii) Undamaged packing
- (iii) Minimum fluid loss during thawing
- (iv) Flesh still feeling firm after thawing

(2) Storage: It should be stored at 18^{0c} (0^{of}). Never refreeze frozen fish once it has thawed as this could constitute a major health hazard.

(3) Canning: The oily fish are usually canned; sardines, salmon, anchovies, pilchard, tuna, herring and herring roe are canned in their own juice or in oil or tomato sauce.

(4) Salting: Salting fish is usually accompanied with smoking process.

- Cured herrings are packed in salt.
- Caviar, the slightly salted roe of the sturgeon is sieved, tinned and refrigerated.

(5) Picking: Herrings picked in vinegar are filtered, rolled and skewered and are known as roll mops.

(6) Smoking: Fish to be smoked may be gutted or left whole. It is then soaked in a strong salt solution (brine) and in some cases a dye is added to improve colour. After this, it is drained and hung on racks in a kiln and exposed to smoke for 5 or 6 hours.

Cold smoking takes place at a temperature of not more than 33^{0c}. This is to avoid cooking the flesh. Therefore all cold smoked fish is raw and is usually cooked before being eaten with the exception of smoked salmon.

Hot smoking is aired at a temperature between 70 – 80^{0c} in order to cook the flesh and does not require further cooking.

How to Choose a Fish

- (1) Choose a pleasant smell
- (2) With a bright glossy look
- (3) Firm flesh.

Storage of Fish:

1. Store fresh in containers with ice if in refrigerator and change daily at a temperature of 1-2^oc
2. Avoid contamination by storing in a separate refrigerator away from other foods. Cooked and raw fish are kept separate.
3. Frozen fish should be stored in a deep freezer at 18^oc. When required, frozen food is removed from the freezer and left uncovered in the kitchen, there is the danger of contamination.
4. Smoked fish should be kept in a refrigerator
5. Use correct colour code boards for preparing raw fish and different ones for cooked fish. Keep the boards clean with fresh disposable wiping clothe
6. Use equipment reserved for raw fish. If this is not possible wash and sanitise equipment before and immediately after each use.
7. Unhygienic equipment, utensils and preparation areas increase the risk of cross-contamination and danger to health.
8. Fish offal and bones are a high risk for contamination and must not be mixed, or stored with raw prepared fish.
9. Wash equipment, knives and hands regularly using a bactericide detergent, or sanitising agent to kill germs
10. Dispose of all wiping clothes immediately after use. Re-used cloths may cause contamination

3.3 Nutritive Value of Fish

For some people fish is a major source of protein. Like meat, fish is of high biological value. Fish is digested and absorbed with little waste. White fish in particular is more easily digested than meat and is a useful food for people with digestive dis-orders. Unlike meat, the fat in fish consists mostly of oils containing unsaturated fatty acids, which is of benefit to those following the dietary goals

Approximate Nutritive of fish:

	Oily fish	White fish	Shell fish
Protein	19.0%	17.5%	15%
Fat	15.0%	0.9%	
Water	67.5%	80.0%	8.5%
Carbohydrate	None	None	Trace
Minerals	2.5%	1.2%	1.4%

3.3.1 Vitamins

Fat-soluble oily fish contains useful amounts of vitamins A and D in its flesh. Canned oily fish contains the most vitamin D. White fish contains vitamin A and D in its liver not in its flesh. Shell fish is not a good source of these vitamins, as it has a low fat content. Water soluble fish does not contain any vitamin C. Most fish does not contain any vitamin C while a lot many contain all amounts of the B-group vitamins.

Mineral Elements

- **Calcium:** most calcium in fish is found in the bones. The bones of canned fish, which have been softened are eaten, they provide a useful sources of calcium
- **Iodine:** Seawater fish are good sources
- **Iron:** Fish are not good sources of iron
- **Fluoride:** Seawater fish are found in all fish. Also, potassium and phosphorous are found in all fish.

3.3.1 Methods of Preparation

Fish can be used in many dishes. In the UK fish is fried in batter and served with potato chips. Overcooking tends to lead to dryness and breaking up of the flesh.

Fish	Uses and preparation
White	Steamed, poached, grilled, fried, or baked. Serve in a roux sauce or in pastry e.g. Russian fish pie, curry fish with sweet and sour sauce etc
Oily	Baked, fried, grilled, poached, and serve with a sharp sauce e.g tartars. Fry in oat meal, stuff with bread-crumbs, herbs, orange etc and bake
Shell	Serve as a starter e.g. prawn cock tail, or in soups, salads, fried in batter, with ice etc

3.3.2 Care of Fish

- All fish should be washed under running cold water before and after preparation.
- Whole fish are trimmed to remove the scales, fins and head using fish scissors and a knife.

Different Fish Cuts

(1) **Steaks:** Thick slices of fish on or off the bone steaks of round fish are called dames. Steaks of flat fish on the bone are be called troncons

(2) **Fillets:** Cut fish free from bone. A round fish yields two fillets while a flat fish yields four fillets

(3) **Supremes:** Prime cuts of fish without bone and skin e.g. salmon, turbot, brills etc.

(4) **Goujons:** Filleted fish cut into strips approximately 8x0.5 cm

(5) **Paupiettes:** Filleting of fish spread with a stuffing and rolled e.g sole, plaice, whiting.

(6) **Plaited:** Also known as entrees, sole fillets cut into three even pieces of about 1 cm of the top and neatly plaited

Characteristic of Fish

1. Bright eye not sunken
2. Plump, firm flesh
3. Plenty of bright scales, firmly attached to the skin
4. Moist skin
5. A fresh sea smell
6. Bright red gills not sunken

For Guttred Fish

- 1) Cut from the vent the two thirds along the fish.
- 2) Draw out the intestines with the fingers or in the case of a large fish use the hook handle of a utensil such as a ladle.
- 3) Ensure that the body lying along the main bone is removed then wash and strain thoroughly.
- 4) If the fish is to be stuffed then it may be gutted by removing the innards through the slits gills, thus leaving the stomach, skin intact, forming a pouch in which to put the stuffing. When this method is used, care must be taken to ensure that the inside of the fish is clear from all traces of blood.

Filleting of Fish

Use a filleting knife; make an incision from the head to tail down the line of backbone.

Remove each fillet, holding the knife almost parallel to the work surface and keeping the knife close to the bone.

Hold the fillet firmly at the tail end and cut the flesh as close to the tail as possible

Keep the knife parallel to the work surface, grip the skin firmly and move the knife from side to side to remove the skin.

4.0 Conclusion

This Unit has been concerned with fish and sea foods. It also discusses the classifications, food value, how to cook, different cuts and characteristic of fish.

5.0 Summary

In this unit you have been greatly exposed to the different types of fish and sea foods, methods of cooking and other vital points to know concerning fish.

6.0 Self-Assessment Exercise

1. Attempt a classification of the fishes known to you
2. How do we preserve fish?

7.0 References/Further Reading

Anital, Tull (2003). *Food & Nutrition*: Tate McGraw–Hill Publishing Company Limited 4/12 Asaf Alli Road New – Delhi 110002.

Fosket, David, Ceserani, Victor, and Kinton Ronald, (2003). *The Theory of Catering*, 10th Edition. Book Point Limited; 130 Milton Park Abingdon Oxon OX14 45 B.

Unit 2 Types of Catering Services and Utilization of Local Commodities in Internationally Acceptable Nigerian Dishes

1.0 Introduction

By local food commodities, we mean the types of food found in Nigeria. These foods are grown in different parts of the country and can be accepted internationally.

2.0 Objectives

At the end of this unit, you should be able to:

- explain types of local food commodities
- demonstrate how to use local food commodities
- cite examples of food made from local commodities.

3.0 Main Content

3.1 Local Food Commodities in the Northern Nigeria

Some of the food commodities found in the Northern part of Nigeria are:

- Wake in English known as Bean
- Dawa - Sorghum
- Gero - Millet
- Tuwo massara - Maize/corn
- Alubasa - Onion
- Tafawanu - Garlic
- Tatasai - Pepper
- Dakali - Sweet potato
- Kalane - Water Melon
- Ayaba - Banana
- Doya - Yam
- Rogo - Cassava
- Lemu - Sweet orange
- Tuwo chikafa - Rice
- Gwande - Paw-paw
- Rake - Sugar cane
- Abaiba - Pineapple
- Kubewa - Okro
- Jadan - Groundnut
- Kwakwa - Coconut
- Yalo - Garden Egg
- Alkama - Wheat
- Kifi - Fish

- Nama - Meat
- Koi - Egg
- monsa - Corin
- Shai - Tea
- Akamu - Ogi
- Millet - Furadenunu
- Millet - Kunnu
- Tuo-dawa - Millet

3.1.1 Food Commodities in the Southern Part of Nigeria

Some of the food commodities found in the Southern part of Nigeria with particular reference to Cross River State are:

- Ugu - Pumpkin leaf
- Water leaf
- Atarodo
- Dry fish
- Stock fish
- Cray fish
- Periwinkles
- Palm oil
- Snail
- Meat
- Cassava
- Afang leave
- Cocoyam
- Etere Afang
- Edikang ikong
- Itororo
- Efere
- Ekpang Nkukwo
- Afia-Efere
- Usung udia
- Efere Edi-tan
- Udot Efere
- Efere ibaba

3.1.2 Local Food Commodities in the Western Part of Nigeria

Some of the food commodities found in the Western part of Nigeria are:

- Ofada rice
- Gari
- Palm oil
- Fish (fresh)
- Fish (Dried)
- Elubo
- Cowpeas
- Cloves

- Coconut
- Eko
- Ewedu
- Gbegiri
- Efo
- Yam for – pounded yam and dundu oniyeri
- Plantain – ipekere
- Ojojo
- Efo varieties
- Igba (garden egg)
- Koko (Cocoyam
- Beans for Akara /moinmoin
- Fufu
- Asaro
- Sapala
- Igbin Snail
- Gari
- Ila (okro)
- Wara (cheese)
- Amala dudu/funfun
- Pounded yam
- Ekuru
- Dodo

1. Mia Kuka

Wash the meat and dry fish

Boil the meat and dry fish and keep separately

Add little potash in water and dadawa, boil for about five minutes and add the kuka. After about three minutes add pepper, boiled meat, dry fish and boil for another five minutes.

Note:

These can be used for main dish.

2. Tuwo masara mia kubewa with giwa Ruwa

- Maize
- Okro
- Fresh fish
- Pepper
- Tomatoes
- Onion
- Salt
- Maggi
- Palmoil
- Dadawa
- Snail
- Cow skin - ponmo
- Lafun - cassava flour

- Orange
- Banana

3.2 How to Use the Local Food Commodities

Some of the local food commodities can be used for starter or appetizer and many can be used for main dish and Dessert or sweet. This means that if well prepared, it can be used internationally to promote Nigeria dishes and culture.

Examples of food made from local commodities

North

(1) Tuwo shinkafa de mia kuka

- Rice
- Salt
- Meat
- Kuka
- Palmoil
- Dry fish
- Potash
- Maggi
- Madawa

(2) For tuwo masara, cut and grate the okro

- Wash the giwan ruwa i.e fresh fish
- Add dadawa into water and boil for five minutes. Add the okro and correct the seasoning for another five minutes
- Wash the pepper, tomatoes, onion etc and ground. Then cook by adding palm oil and maggi and seasoning to taste. Cook for about thirty-five minutes, add the fish and cook for about ten minutes. Serve with the okro and tuwo masara.

(3) Kunnu

- Millet
- Sugar
- Cloves
- Ginger

Preparation

- Wash the millet /maize and soak overnight.
- Mill the millet/maize ginger and cloves and sieve
- Divide the milled and sieved millet maize into two.
- Boil water and cook one half, allow to cool and then mix with the one half-uncooked. Allow to cool before serving

(4) Wena da mia Taushe

- Rice
- Alefo (spinach)
- Pumpkin
- atarubu (pepper)
- Dadawa locust bean
- Alubosa
- Palm oil
- Maggi
- Salt
- Agusi

Preparation

- Soak the rice overnight.
- Mill the rice and sieve
- Mix with water and shallow fry in wena pan
- Cut the Alefo, steam in hot water grind the pepper and onion, boil by adding the palm oil and maggi. Add the dadawa and cook for fifteen minutes, add the Agusi and cook for ten minutes then add another ten minutes season.
- Serve by pouring the taushe soup on top of the wena.

From the South

(5) Afia-Efere

- Grounded pepper or fresh pepper
- Pounded yam
- Salt to taste
- Maggi
- Water
- Fish
- Goat meat
- Crayfish
- Smoked fish

Preparation

- Boil water for 5-10 minutes. Add the properly pounded yam to thicken the soup
- Add spice, pepper and crayfish. After 2 minutes add the goat meat and fish season and cook for fifteen minutes
- Add salt to taste, serve with pounded yam

(6) Afang soup

- Mfi (Periwinkle)
- Dry fish
- Fresh fish
- Dry meat
- Fresh meat

- Crayfish
- Onion
- Salt
- Palm oil
- Maggi
- Water leaf
- Afang vegetable

Preparation

- Cut the periwinkle and wash it very well. Leave in a bowl of salted water.
- Slice the Afang vegetable into small size and pound. Slice Water-leaf and blend the pepper, crayfish and onion together. Wash the fish, meat and pour them in a neat pot.
- Put it on the fire, pour the blended pepper and crayfish into the pot and steam for 30 minutes
- Add oil, maggi and salt to taste
- Pour the prepared water leaf first, after 3 minutes pour the pounded Afang vegetable. Allow it to boil for 5 minutes and bring it down then serve.

(7) Edikang ikong

- Goat meat
- Stockfish
- Dry fish
- Snail
- Periwinkle
- Fresh water leaf
- Fresh ugu leaf
- Red oil
- Fresh grounded pepper
- Salt and maggi to taste
- Chopped onions
- Crayfish
- Pomo-sliced

Preparation

- Heat the oil and fry the onion
- Add the fresh ugu and stir well to prevent burnt.
- When the leaves are tender, add the stock fish, fillet, snail and Periwinkle, stir well to avoid being burnt. Add the crayfish and stir well. Add pepper and the meat
- Add salt and maggi to taste stir
- Reduce heat and allow to simmer for 5 to 6 minutes
- Correct the seasoning
- Remove from heat and serve with pounded yam or Fufu or Gari

(8) Fresh Fish Pepper Soup

- Wash the fish thoroughly.
- Prepare the pepper soup with spices and boil for 20 minutes. Add salt and maggi to taste. Boil for another 5 minutes, add the fresh fish and cook for 10 minutes. Serve hot.
- Efere Afang
- Afang leare

- Crayfish
- Meat
- Dry fish
- Stock fish
- Ponmo
- Periwinkle
- Fresh pepper
- Maggi
- Cow leg
- Water leaf
- Onion
- Palm oil
- Salt

Preparation

- Steam the meat, fish, stockfish, cow leg, and 'ponmo' together.
- Add the crayfish, pepper and palm oil with maggi. Allow to boil for 15 minutes
- Add the water leaf for 2 minutes. Serve with Garri

(9) Orange Juice

- Squeez the orange
- Remove the seed
- Add sugar if necessary
- Serve cold

Local food commodities from Western Nigeria

(10) Ofada Rice

- Ofada rice
- Offals
- Fresh Tomatoes
- Fresh red pepper
- Onions
- Pimento
- Cow skin (ponmo)
- Maggi
- Palm oil
- Salt
- Leaves

Preparation

- Pick the stone from the rice.
- Wash in water and sieve to remove remaining stones. Wash very well again.
- Boil water and pour in the washed rice and allow to boil
- Add enough water to boil the rice. After boiling pour in a strainer to remove water
- Wash the leaves and put in a strainer to drain its water.
- Put the rice into the leaves and wrap.
- Blend the pepper, onion, tomatoes and pimato

- Cut the offals and cow skin into small pieces, wash very well. Boil to extract fact and dirt and add seasonings.
- Put palm oil in a clean pot on fire and heat very well, pour in the blended pepper and stir.
- Add seasonings and salt
- Allow to cook very well
- Pour in the diced offals and cow skin
- Serve on top of the rice.

(11) Imoyo Eba

- Gari finely sifted
- Margarine
- Palm oil
- Stock fish

Preparation

- Boil the stock, margarine and salt. Pour in the gari little by little, stirring occasionally. Cook for 2 minutes turning constantly
- Allow the consistency to be firm and not too sticky.

(12) Frejon

- Clean cowpeas
- Coconut
- Water
- Cloves
- Sugar

Preparation

- Boil the cowpeas until very soft using low heat to avoid scorching
- Mash into a smooth paste with a wooden spoon and sieves to a puree or use blender prepare the coconut milk. Add the coconut milk and cloves to the cowpeas.
- Boil uncovered until very thick stirring frequently for about 1½ hour.
- Add a little sugar and a very little salt to taste
- The consistency should be like thick cream. It is served with fish stew and dry garri

(13) Amala with Ewedu /Gbegiri Soup

Preparation

- Boil water then stir the yam flour. Add water if too thick and stir well until fluffy. Keep inside leaves or nylon.
- **Ewedu:** Boil water add potassium and locust bean. Boil for 10 minutes, add the ewedu leaves. Use broom to patch it until the leaves are divided into blended particles, add salt to taste.
- **Gbegiri:** Wash beans, peel the back and cook for 45 minutes. Use broom to patch it to make a beans paste. Add water, dry pepper onion, locust bean maggi and palm oil. Cook for another 10 minutes.
- Serve the Amala ewedu/gbegiri with stew of choice.

4.0 Conclusion

It can be concluded from the discussion in this Unit that Nigerian local food commodities can be standardized, if well prepared and served internationally

5.0 Summary

Local food commodities if well prepared can be used to entertain people of different background since most of these commodities have high nutritional value and also help to promote Nigerian culture.

6.0 Self-Assessment Exercise

Mention 5 local food commodities.

7.0 References/Further Reading

Anital, Tull (2003). *Food & Nutrition*: Tate McGraw–Hill Publishing Company Limited 4/12 Asaf Alli Road New – Delhi 110002.

Kunton (1984). *Practical Cookery 10th Edition Sourced from* [www.goggle. Com.](http://www.goggle.com)

Unit 3 Menu Planning

1.0 Introduction

Planning the menu is very essential in the hospitality industry. It is important to know the type of people that is going to eat a particular menu in terms of age, health, profession, nationality and the type of food that is available in the market at a particular time and the trend in market the income of individual etc.

For an industry to maximise profit it is very important that the menu should be planned before being presented to the guest/customer.

Also certain things have to be considered when planning a meal or menu. Such as location, time, seasonality, trend, availability of suppliers, space and equipment, competition etc. All these are put into consideration so that the aim of the industry is achieved.

2.0 Objectives

At the end of this unit, you should be able to:

- understand menu planning
- identify factors to be considered in menu planning
- plan a menu
- explain the types of menu
- manage a function
- understand the advantages and disadvantages of menu planning.

3.0 Main Content

3.1 Menu Planning

Initially, menus were regarded as the lists of food, in seemingly random fashion with the food being raw, prepared or cooked. Individual menus came into use early in the 19th century and courses began to be formulated. For special occasions, seven or so courses might be served e.g. hors oeuvres soup, fish, entrée, sorbet, roast, sweet, savoury.

As the 20th century advanced and more people moved and settled from country to country, so began the introduction of styles of food and services from a wide variety of nations, resulting in the high number of ethnic dishes and ethnic restaurants which abound today. Eating at work, at school, in hospitals and institutions led to the need for healthy, budget conscious food.

3.1.1 Factors to Consider When Planning a Menu

Certain points are considered to make menu planning effective such as:

1. **Competition:** You should be aware of any competition in the locality, including prices and quality. As a result it may be wiser to produce a menu quite different and unique.

2. **Location:** There is need to study the area in which your establishment is situated and the potential target market of customers.
 3. **Analyse:** Analyse the type of people you are planning to cater for. For instance, office workers in the city requires quick service
 4. **Outdoor Catering:** Do you have the opportunities for outdoor catering or take away, because many function may demand for take away
 5. **Estimated Customer Spending Per Head:** This is very important when catering. For example. For hospital staff and patients, children in school, workers in industry. Whatever level of catering a golden rule should be “offer value for money”.
6. Modern trends in food should be considered alongside popular traditional dishes. From time to time trend changes, therefore there is the need to know the current trend in the market.
7. Type of dish should also be considered in order to plan ahead for the materials to use for the cooking.
8. Price of dish must be put into consideration and also if it is going to be 3 or 2 course menu or a la carte.
9. Space and Equipment in the kitchen will influence the composition of the menu. For example, overloading, use of deep frying pan, salamanders and steamers
- 10. Number and Capability of Staff:** If a staff is over stretched it can easily reduce the standard of production envisaged.
- 11. Availability of Supplies and Reliability of Suppliers:** Seasonal foods and storage space should be considered before planning a menu since only certain food can be available at a particular time.
- 12. Cost:** Cost of food is very important because it is crucial if an establishment is to make profit. Thus, costing is essential for success.
- 13. Food Allergies:** Some people are allergic to some particular food so it is very important to note the kind of food to prepare.

3.1.2 Planning the Menu

Planning the menu is the main thing in catering services. Therefore, there is a need to consider:

1. **Type and Size of Establishment:** It can be a school, hospital, restaurant etc.
2. **Customer Profile:** Different kinds of people, children, diabetic patients, hypertensive patients etc. Some people have their likes and dislikes.
3. **Special Requirement:** Vegetarians,, Muslim kosher etc.
4. **Time of the year:** Certain dishes that are acceptable in summer may not be acceptable in winter
5. **Foods in Season:** are usually in good supply and reasonable in price
6. **Special Days:** Like Christmas, Eidel- kabir, Easter, Valentine day should be considered
7. **Time of the Day:** breakfast, brunch, lunch, tea, high tea, dinner supper, snack, special function.
8. **Price Range:** charge a fair price and ensure good value for money. Customer satisfaction can lead to recommendation and repeat business.
9. Number of courses
10. Sequence of courses
11. Use menu languages easily understood by customers.
12. Sensible nutritional balance.
13. Avoid repetition of ingredients from dish to dish
14. No unnecessary repetition of flavour and colours.

3.1.3 Types of Menu

- A) **A la Carte:** This is an individually priced menu giving the customer the opportunity of compiling his own menu. It is cooked to order.
- B) **Table d'hôte or set price menu.** This is a menu usually of two or three courses at a set price. A choice of dishes may be offered at all courses.
- C) **Specialty party or function menu:** These are menu for banquets or special functions like cocktails, wedding birthday, Christmas, Sallah etc
- D) **Ethnic menu** are specialised foods like Chinese, Indian, kosher, African, Caribbean, Greek, or specialty like steak, fish, pasta vegetation etc.
- E) **Hospital Menus:** It is a form of menu card given to patients day before service so that his or her preferences can be ticked.
- F) **Menu for the Working Class:** These are menu served to people at work which varies in standard and extent from one employer to another due to company policy on the welfare of their staff and work force.
- G) **Children Menu:** Emphasis is on healthy eating in schools and a balanced diet, particularly in boarding schools
- H) **Cyclical Menus:** This covers a given period of time. This consists of a number of set menu for a particular establishment such as industrial catering restaurant, cafeteria, and director's dinning room, hospital or college refectory. At the end of each period the menu can be used again. The length of the menu is determined by the management policy, time of the year and foods available. It needs serious monitoring in order to take account of changes in customer requirements and variation in weather conditions

3.2 Managing a Function

A function is a service of food and drink at a specific time and place, for a given number of people at a known price.

This could be:

- (1) Social function:- Weddings, Anniversaries
- (2) Business functions:- Conferences, Meetings, Lunching, Working dinners
- (3) Social and Business functions: - Corporate variety functions like entertaining conference, reception. Some establishment is mainly for special functions while some use it as part of the product range e.g. Hotels offer accommodation, restaurants, conference facilities and banqueting facilities. Availability of these facilities will determine the level of market for which it is catering for.

Advantages of Managing a Function

- a. Pre-planned menu enables the caterer to ensure that good menu planning is practised.
- b. Before selecting dishes that guest prefers, the caterer should consider what the customer likes, and the effect of these dishes upon the meal as a whole.
- c. Menu which are planned and costed in advance allow banqueting managers to quote prices instantly to a customer
- d. Menu can be planned taking into account the availability of kitchen and service equipment, without placing unnecessary strain upon such equipment
- e. The quality of food is likely to be higher if the kitchen staffs are preparing dishes that they are familiar with and have prepared a number of times before.

Disadvantages of Managing a Function

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

4.0 Conclusion

It is very important to plan menu in the catering industry because it will allow the caterer to plan ahead, make the job easy and also help to maximise profit. It also helps to know the type of menu to prepare, the foods in season, the type of equipment and space in the kitchen. The preparation for special function is also important since the caterer must plan ahead of such with serious preparations so that the establishment will not run at a loss.

5.0 Summary

This Unit has been able to establish that caterers should plan their menu, know the various types of menu and advantages of menu in order to maximise profit and get more customers.

6.0 Self-Assessment Exercise

Describe the various types of menu known to you.

7.0 References/Further Reading

David Foskett, Victor Caesarean, and Ronald Kinton. (2003). *The Theory of Catering*, (. 10th Edition), Book Point Ltd: 130 Milton Park, Abingdon.

Unit 4 Purchasing, Use and Maintaining Kitchen Equipment

1.0 Introduction

Without the necessary equipment, catering operation will be very difficult. Therefore there is need to know how to purchase, use and maintain the kitchen equipment. Purchasing could be direct from the manufacturers or from the secondary source, the main market.

Using kitchen equipment demands skills and technicality since some of the equipment are operated with electricity, some with gas while some are operated manually. There is need for the user to know how to operate it, the time allowed and instructions needed to operate it.

Maintenance is very important because well-maintained equipment will last longer, will not easily spoil and will not cause danger to the user. Therefore it is pertinent to know the purchasing procedure, use and maintenance of kitchen equipment.

2.0 Objectives

At the end of this unit, you should be able to:

- identify large, mechanical and small equipment
- understand the tools and utensils used in large kitchen
- explain the criteria for planning and layout of cooking area
- use kitchen equipment
- clean and maintain kitchen equipment
- understand the necessary precautions when using the equipment.

3.0 Main Content

3.1 Purchasing, Use and Maintaining Kitchen Equipment

Equipment for cooking provides the backbone of any good catering operation. It is the key to catering success and quality. In terms of food safety, it controls the most critical step in the food production process.

Kitchen equipment is expensive so initial selection is important.

Large equipment:

(A) Ranges and Ovens: Large varieties of ranges are available and operated by gas, electricity solid fuel, oil, and microwave.

Uses

- Oven doors should not be slammed, as this is liable to cause damage.
- Unnecessary or premature lighting of ovens can cause wastage of fuel which is expensive

(B) Convectional Ovens: These are ovens in which a circulating current of hot air is rapidly forced around the inside of the oven by a motorised fan or blower, which results in

even and constant temperature which does the cooking of food successfully in any part of the oven.

Uses

- Easily programmed to produce exact cooking time.
- Saves time or reduce cooking time.
- Easy to cook.
- Do not slam oven doors.
- Easy to clean.
- Produce food in less space.
- Fully automatic – enables desired browning level and exact core temperature to be achieved.
- Energy efficiency

(C) Microwave Oven: Is a method of cooking and heating food by using high frequency power. The energy used is the same as that which carries the television signal from the transmitter to the receiver at a high frequency.

Uses

- Do not use metal as the microwave reflects it.
- Do not cook fatty foods or water.
- Use glass, earthenware, plastic or paper container before being put in the microwave oven.

(D) Steamers: There are 3 basic types of steaming ovens.

- (1) Atmospheric
- (2) Pressure
- (3) Pressureless

Uses

- Steamers are used for steaming, stewing, poaching, braising, roasting, baking, vacuum cooking, blanching and defrosting.

(E) Boiling Pan or Boilers: available in different metals, aluminum, stainless steel and in various sizes and may be heated by gas or electricity.

Uses

- For boiling, stewing large quantity of food.
- After use, wash thoroughly the boiling pan with mild detergent and rinse well.
- Grease the filtering apparatus occasionally.
- Check the gas jets and pilot to ensure correct working.

(F) Pasta Cooker: Fitted with water delivery and drain taps.

Uses

- For cooking several types of pasta simultaneously. It is electrically operated.

(G) Deep Fat Fryers: heated by gas or electricity and incorporate a thermostatic control in order to save fuel and prevent overheating.

(H) Hot Cupboards: used for heating plates and serving dishes and for keeping food hot. Care should be taken to see that the amount of heat fed into the hot cupboard is controlled at a reasonable temperature.

It is heated by steam, gas or electricity.

Uses

- The door should slide easily.
- Occasional greasing is necessary
- Top of most cupboards are used as serving counters so must be heated to a higher temperature than the inside.
- Top should be cleaned thoroughly after each service

(I) Bain – Marie: Available in many designs. It is an open well of water used for keeping foods hot and is incorporated to hot cupboards.

Uses

- Heated by steam, gas or electricity.
- Sufficient heat to boil the water must be available.
- Other equipment are: Grills, salamanders, fry plates, barbecues, sinks, tables, butchers or chopping block, storage racks.

Mechanical Equipment

(A) Power Driven Machines

- Worm – type mincing machines
- Rotary knife bowl – type chopping machines
- Dough mixers
- Food mixing machines when used with attachments for mincing, slicing, chipping and any other cutting operation, or for crumbling.
- Pie and tart making machines
- Vegetable slicing machines

Potato – Peelers

- Potato should be free of earth and stones before loading into the machine.
- Water plates should be turned on and the abrasive plate set in motion before the potato is loaded.
- The interior should be cleaned out daily and the abrasive plate removed to ensure that small particles are not lodged below.
- The peel trap should be emptied as frequently as required.
- The waste outlet should be kept free from obstruction

(B) Power Driven Machines

- Circular knife slicing machine used for cutting bacon and other foods.
- Potato chipping machines.

3.2 Food Processing Equipment

(A) Food Mixer: it is labour saving, electrically operated and used for many purposes like mixing pastry, cakes, mashing potatoes, beating egg whites, mayonnaise, cream, mincing or chopping meat and vegetables.

Care and uses

- It should be lubricated frequently in accordance with manufacturer's instructions.
- The motor should not be overloaded as it can cause obstruction to the rotary components. For example, if dried bread is being passed through the mixer attachment without sufficient care, the rotary cog can become so clogged with the bread that it is unable to move and if the motor is allowed to run it can cause damage to the machine.
- All components as well as the main machine should be thoroughly washed and dried. Care should be taken to see that no rust occurs on any part. The mixer attachment, knife and plates will rust if not given sufficient care.

(B) Liquidiser or Blender: labour saving piece of kitchen machinery using a high speed motor to drive specially designed stainless blades to chop, puree or blend foods efficiently and very quickly. They are also useful for making breadcrumbs. As a safety precaution, food must be cooled before being liquidised.

(C) Food Slicers: Obtained both manually and electrically operated. They are labour saving devices but can be dangerous if not used with care, so working instructions should be placed in a prominent position near the machine.

Uses

- Care should be taken that no material likely to damage the blades is included in the food to be sliced. It is easy for a careless worker to overlook a piece of bone which if allowed to come into contact with the cutting blade, could cause severe damage.
- Each section in contact with food should be cleaned and carefully dried after use.
- The blade or blades should be sharpened regularly.
- Moving parts should be lubricated but oils must not come into contact with the food.
- Extra care must be taken when blades are exposed

(D) Electric Masher: It has removable section, the main machine should be washed and dried after use, and extra care should be taken over those parts which come into contact with food.

(E) Ice Cream Makers, Juice and Mixers: These are available from 1 litre capacity and helps to produce home made ice cream, using fresh fruit during seasons or frozen and canned fruits at all times of the year. Juicers and vegetable juices, milk shakes and cocktails are also used.

Boilers

(A) There are two main groups of bulk boilers from which boiling water can only be drawn when all contents have boiled. The automatic boiler provides a continuous flow of boiling water. Other boilers include coffee and tea heaters. Care should be taken with the pilot light to see that it is working efficiently on the gas type. Regular inspection and gas fitters company should carry out maintenance. Storage chamber for coffee heaters

are thoroughly cleaned with hot water and after each use and then left full of clean cold water. .Draw up taps should be cleaned regularly.

Refrigerators, cold rooms, chill rooms and deep freezer cabinets and

compartments: Adequate ventilation is vital, there is need to locate the refrigerator in a well-ventilated room away from

- Intense heat, of cookers, ovens, radiators, boilers etc.
- Direct sunlight from window or sky lights
- Barriers to adequate air circulation

Therefore it is necessary to have refrigerated space at different temperatures.

Cold rooms may be divided into separate rooms:

- One at a chill temperature for strong salads, fruits, and certain cheese.
- Another for meats, poultry, game and tinned food which have to be refrigerated
- Others for deep-frozen foods.

Refrigerated cabinets are used in large larders.

- Deep freeze cabinets are used where walk in, deep-freeze section is not required and are maintained at 180^{0c}. This requires defrosting twice a year.
- Close all refrigerator doors as quickly as possible to contain the cold air

Dish Washing Machine

- For hygienic washing, generally recognised requirements are a good supply of hot water at a temperature of 60^{0c} for general cleansing followed by a sterilising rinse at 82^{0c} for at least one minute.
- Dish washing machine takes over an arduous job and save a lot of time and labour, thereby ensuring that a good supply of clean, sterilised crockery is available.

There are Three Types of Dish Washing Machines

1. **Spray Types Pass:** the dishes are placed in racks which slide into the machines where they are subjected to a spray of hot detergent water at 48-60^{0c} The racks then move on to the next section where they are rinsed by a fresh hot shower at 82^{0c}, where they are sterilised and on passing out into the air they dry off quickly.
2. **Brush-Type:** this uses revolving brushes for the scrubbing of each article in hot detergent water, the articles are then rinsed and sterilised in another compartment.
3. **Agitator Water Machines:** - baskets of dishes are immersed in deep tanks and the cleaning is performed by the mechanical agitation of the hot detergent water. The loaded baskets are then given a sterilising rinse in another compartment.

Small Equipment and Utensils

- These are made from variety of materials
- Such as non-stick-coated metal, iron, steel, copper, aluminum, wood.

A) Iron: heavy black and wrought iron are used for frying pans. For instance omelets pans, oval fish frying pans, frying pans, pancake pans.

B) Wrought Steel: used for baking sheets

C) Tinned Steel: used for conical strainer, colander, and vegetable reheating container, soup machine, and sieves.

- D) Aluminum:** for saucepans, stockpots, sautés, sauté pans, braising pans, fish kettles, and deep pan dishes.
- E) Stainless Steel:** stainless steel pans, and small equipment.
- F) Non-Stick Metal:** for sauce pans, frying pans backing and roasting tins
- G) Cutting boards** used to protect table and edges of cutting knives
- H) Wooden Chopping Boards:** Also into cut food materials in the kitchen and to protect the table and edges of cutting knives.
- I) Rolling Pins, Wooden Spoons and Spatulas:** used to roll pastries, stir food etc.
- J) Wooden Sieves and Mandolins:** used for sieving and straining.
- K) China and Earthenware:** used for serving and also for microwave dishes
- L) Materials:** used for kitchen clothes, for straining soups and sauce, tea towel, oven cloths etc.
- (M) Papers:** for lining cake tins, making piping bags, wrapping easy greasy items of food for disposable, for drying hands, for wiping and drying equipment, foils for wrapping sandwiches, snacks, hot and cold foods, metal foil for wrapping and covering foods, for protecting oven roasted joints during cooking.

3.3 Planning and Layout of Cooking Area

Kitchen equipment is very expensive so the following points should be considered when planning a layout of cooking area.

- 1) Overall Dimension:** In relation to space available.
- 2) Weight:** Can the floor support the weight?
- 3) Fuel Supply:** Can the existing fuels supply sufficient to take the increase?
- 4) Drainage:** Adequate facilities for drainage
- 5) Water:** Is water available where necessary.
- 6) Use:** Does the food to be produced justify good use?
- 7) Capacity:** Can it cook quantities of food required efficiently?
- 8) Time:** Can it cook the given quantities of food in the time available?
- 9) Ease:** Is it easy for staff to handle, control and use properly?
- 10) Maintenance:** Is it easy for staff to clean and maintain?
- 11) Attachments:** Is it necessary to use additional equipment or attachments?
- 12) Extraction:** Does it require facilities for fumes or steam?
- 13) Noise:** Does it have an acceptable noise level?
- 14) Construction:** Is it will made, safe, hygienic and energy efficient, and are all handles, knobs and switches sturdy and heat resistance?
- 15) Appearance:** If equipment is to be on view to customers, does it look good and fit in with the overall design.
- 16)** Are there spare parts are they easily obtainable

4.0 Conclusion

In this Unit, we have noted that there are 3 major types of kitchen equipment and it is very important to know how to use the equipment for ease. The Unit also discussed the uses of the equipment, the length of use as this will make the job very easy, saves time and smooth operation

5.0 Summary

So far you should be able to identify large equipment tools and utensils used in a large kitchen area, the uses of kitchen equipment, cleaning and maintenance and the necessary precautions when using the equipment.

6.0 Self-Assessment Exercise

List the types of kitchen equipment and give two examples of each.

7.0 References/Further Reading

Fosket, David, Ceserani, Victor, and Kinton Ronald, (2003). *The Theory of Catering*, (10th Edition). Book Point Limited; 130 Milton Park Abingdon Oxon OX14 4B.