

LEARNING MODULE 04

TVET-PROGRAMME TITLE: HOTEL KITCHEN OPERATION LEVEL I

Unit of Competence: Organize and prepare food

Module Title: Organizing and prepare food

MODULE CODE: - **CST HKO1 M041012**

- LO1: Select, prepare and use equipment
- LO2: Assemble ingredients for menu items
- LO3: Prepare food items
- LO4: Portion food ingredients
- LO5: Contribute to profitability**

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This learning guide is developed to provide you the necessary information regarding the following content coverage and topics :-

- ✚ Select, prepare and use equipment
- ✚ Assemble ingredients for menu items
- ✚ Prepare food items
- ✚ Portion food ingredients
- ✚ Contribute to profitability
- ✚ Reduce food preparation costs and negative environmental impacts

This guide will also assist you to attain the learning outcome stated in the cover page.

Specifically, upon completion of this Learning Guide, you will be able to –

1. Select knives and equipment's of the correct type and size for the job
2. Use equipment correctly, safely and hygienically
3. Identify ingredients according to standard recipes
4. Assemble ingredients according to the correct quantity, type and quality required
5. Prepare food items for menus according to correct weight, amount and number
6. Clean, peel and prepare vegetables and fruits
7. Prepare dairy products required for menu items
8. Measure, sift where appropriate and use dry goods as required for menu items
9. Correctly handle all food items
10. Prepare food items in the required form and timeframe
11. Select and use suitable knives and equipment for food portioning
12. Portion food ingredients accurately, according to size, weight and required menu items
13. Store prepared and portioned foodstuffs safely
14. Use the quantity, weight and portions of ingredients to minimize wastage and maximize profitability of meals prepared
15. Prepare the correct amount of food items according to expected numbers of customers

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16. Use energy and water resources efficiently
17. Save re-usable by-products of food preparation for future cooking activities
18. Use recyclable products during food preparation and dispose of them in designated recycling bins
19. Safely dispose of all kitchen waste and hazardous substances to minimize negative environmental impacts



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Learning Instructions:

1. Read the specific objectives of this Learning Guide.
2. Follow the instructions described below
3. Read the information written in the “Information Sheets”. Try to understand what are being discussed. Ask you teacher for assistance if you have hard time understanding them.
4. Accomplish the “Self-checks”.in each information sheets.
5. Ask from your teacher the key to correction (key answers) or you can request your teacher to correct your work. (You are to get the key answer only after you finished answering the Self-checks).
6. If you earned a satisfactory evaluation proceed to “Operation sheets and LAP Tests if any”. However, if your rating is unsatisfactory, see your teacher for further instructions or go back to Learning Activity.
7. After You accomplish Operation sheets and LAP Tests, ensure you have a formative assessment and get a satisfactory result;
8. Then proceed to the next information sheet.

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1.1. Selecting knives and equipment of the correct type and size for the job

The knife is a chef's basic tool; it is the piece of equipment that is used most frequently in a commercial kitchen. While there are a range of knives designed to perform different tasks, all knives have a blade (usually made of stainless steel or high-carbon stainless steel) and a handle (usually wooden, metal or plastic). Some different types of knives include:

- a. **Chef's knife (or cook's knife):** the most commonly used knife as it is best suited to chopping, slicing and dicing. The blade is between 20 and 25cm long, is wide at the heel and tapers to a point. The handle is offset to avoid your knuckles hitting the chopping board.



fig1: Chef's knife

- b. **Paring knife:** a small knife with a pointed blade about 7cm long. It is used for the small tasks in the kitchen such as peeling, cutting, turning and artistic work.



Fig2: Paring knife

- c. **Turning knife:** a small knife with a curved and pointed blade about 5cm long. The curved blade makes this knife ideal for turning vegetables and artistic work.



Fig3: Turning knife

- d. **Filleting knife:** has a long, narrow and flexible blade and as the name suggests, is used to skin and fillet fish and poultry.



Fig4: Filleting knife

- e. **Carving knife:** has a long, flexible blade with alternating Granton pockets. It is used to carve cooked meats such as roast beef, lamb, pork, and ham. The flexible blade allows the chef to follow the shape of the food being carved and the Granton edge prevents the meat from sticking to the blade.



Fig5: Carving knife

- f. **Boning knife:** has a thin, pointed blade about 12cm long, allowing the chef to get as close as possible to the bone when cutting raw meat and poultry.

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Fig6. Boning knife

- g. **Meat cleaver:** has a wide, sharp blade and is used for chopping and cutting through meat with bones.



Fig7. Meat cleaver

- h. **Serrated knife:** or bread knife, has a long, serrated blade and is used to cut bread and baked goods. The serrated blade does not cause damage to the food being cut.



fig8. Serrated knife

Knives and utensils need to be cleaned and sanitized effectively. This can be done by washing in hot water with detergent, rinsing and air drying. Some knives and utensils may be placed in a dishwasher. Items such as sieves, conical strainers and colanders need special attention to ensure all food particles are dislodged. Piping bags, aluminium and copper items and chopping boards also need special attention.

Be careful when cleaning knives. Do not place them in a sink full of soapy water as this causes a safety hazard to anyone who puts their hand in the water. Clean and dry your knife immediately after use.

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Knives need to be stored carefully to prevent damage to the edge of the knife blade and to prevent accidents from occurring. Wooden knife blocks and magnetic knife racks are common ways of storing knives in a kitchen. If knives are kept in toolboxes or drawers, the blade should be covered with a shield. Knife cases and knife wraps are suitable portable storage methods. Utensils are generally stored in toolboxes, drawers or on shelves.

Parts of a knife



Fig9.parts of knife

utensils

Utensils are small, hand-held, non-electrical pieces of equipment. A large number of different utensils are used in commercial kitchens. Some common utensils and their uses are shown below.

- a. **Ladle:** a long handled spoon used to serve liquid foods such as soup.



Fig10. Ladle

- b. **Palette knife:** also called a spatula, has a long, flexible blade with a rounded end. It is used for spreading and scraping soft mixtures, mixing and lifting and flipping flat foods.



Fig11. Palette knife

- c. **Parisienne scoop:** an implement with a small, half spherical stainless steel blade on either one or both ends. It is used to cut balls from fruits, vegetables and butter and is also known as a melon baller.



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Fig12. Parisienne scoop

- d. **Piping bag and nozzle:** used to push out soft mixtures such as cream, icing or mashed potato into attractive shapes.



Fig13. Piping bag and nozzle

- e. **Pastry brush:** a brush with thickly packed bristles used for brushing pastry and applying glazes, marinades etc.



Fig14. Pastry brush

- f. **Tongs:** made from stainless steel or plastic, they are used to lift and turn food



Fig15.tong

- g. **Peeler:** used for peeling fruits and vegetables, the blade is slotted and can either be fixed or swivelling.



Fig16.peeper

- h. **Balloon whisk:** used to beat air into and lumps out of a mixture by whisking the food through loops of wire.



Fig17. **Balloon whisk**

- i. **Sharpening steel:** used to maintain the cutting edge of a knife.



Fig18. **Sharpening steel**

- j. **Corer:** a stainless steel implement with a sharp, strong and rigid blade, used to remove cores from fruit such as apples.



Fig19.corer

- k. **Sharpening stone:** used to sharpen knives.

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Fig20.sharpening stone

l. Basting spoon: a deep, long handled spoon with a variety of uses.



Fig21. Basting spoon

m. Slotted spoon: a deep, long handled spoon with holes or slots, used to lift food out of hot liquids. Also known as a perforated spoon.



Fig22. Slotted spoon

n. Scraper: can be made of plastic or stainless steel, used to scrape up vegetables or to clean pastry boards.



Fig23. Scraper

1.2.Using equipment correctly, safely and hygienically

Knife handling techniques

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One of the first and most important skills a chef needs to learn is how to handle a knife. A knife that is handled correctly is a safe, efficient and effective tool for food preparation. Incorrect handling damages the knife and the food and is dangerous to the chef. When learning to use a knife it is much better to concentrate on using the correct technique and cutting accurately. As you gain experience and confidence in using a knife, you will also gain speed. It is important to grip your knife correctly to ensure you have maximum control of your knife. When the heel of the blade is on the chopping board, you should have plenty of room for your thumb and all your fingers to firmly grasp the handle. Your grip should be firm but relaxed; if you hold your knife too tightly your hand will tire quickly and cutting will be difficult.



Fig10.the correct grip of knife

Your free hand is also important when using a knife correctly. It is used to hold the food so it will not slip and move, and to guide the knife blade when cutting.

When using a knife, remember that different parts of the blade are used for different tasks. The tip is used for fine, delicate work, such as slicing mushrooms or dicing onions. The centre is used most often for general work such as slicing vegetables. The heel is used when more force is needed such as when you are cutting through a bunch of celery.

Knife sharpening

Using a steel

A steel is used to maintain the cutting edge of a knife. This is known as honing. There are two main ways to hone a knife.

Method 1: Hold the steel securely in one hand at a 45° angle. Place the heel of the knife against the tip of the steel at a 10–20° angle. Move the knife down the steel in a slicing motion until the tip of the knife has been honed. Use the same method to stroke the other side of the knife against the steel.

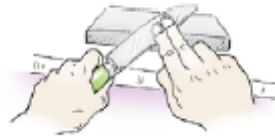
Method 2: The steel is held with the tip resting on a chopping board at a 90° angle. The knife is then honed in the same way as method 1, using a 10–20° angle and stroking from the heel of the knife to the tip. After honing a knife ensure you wash and dry it carefully.

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Method 1



Method 2



Information sheet2	Assembling ingredients for menu items
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2.1. Identifying ingredients according to standard recipes

A recipe gives you information on how to prepare food. Recipes include information such as the name of the recipe, a list of ingredients and step-by-step instructions on what to do with each ingredient (such as when to add it and how to cook it), how to garnish and serve the food, ideas for modifying the recipe and the serving yield.

Standard recipes are used to standardize the production of every food item on a menu. They ensure that the food will be consistent in quality, quantity, cost and presentation, regardless of which chef prepared the food. Standard recipes are also used to assist the training of new staff, write accurate bulk food orders, control portion size, record food cost, establish the food cost percentage for each item and to maintain consistent quality.

While a recipe will give you a precise set of instructions about how to prepare a dish, it is assumed that you already have a good knowledge and understanding of culinary terminology and

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cooking methods to be able to understand the instructions. To interpret a recipe correctly and effectively you should read the entire recipe thoroughly before starting and check that you understand all the terms used. Then collect all the required ingredients and equipment, pre-heat the oven if needed, weigh and measure ingredients accurately and proceed step-by step through the method. Check the product while it is cooking and maintain a clean work area.

Sometimes you may need to adjust a recipe to yield a different number of portions. This can be a complicated process and involves multiplying or dividing quantities of each ingredient. Care needs to be taken when adjusting recipes as mistakes can easily occur and the wrong quantity of just one ingredient (e.g. salt) can spoil the whole product.

Standard features of a recipe

The standard features of a recipe include:

- + Preliminary preparation
- + Equipment
- + Quantity of ingredients
- + Methods
- + Cooking temperature
- + Cooking time
- + Number of portions recipe will produce
- + Total cost of product

Types of menus

There are several different types of menus offered by hospitality establishments, depending on the occasion, customer, season, hours of business, etc.

- a. **Table d'hôte** (Means 'table of the host'.) A set menu, consisting of two to four courses for a set price. The customer has a choice of two to three dishes for each course.
- b. **Set menu** As the name suggests, all parts of this menu have been pre-determined, giving the customer no choice of dishes. Set menus are commonly used at large functions, enabling pre-preparation for all of the dishes. A set price is charged per person.
- c. **À la carte** (Means 'from the card'.) A list of dishes in menu order from appetisers to main courses to desserts is presented to the customer. Each dish is individually priced and the customer can select any combination of dishes from the menu.
- d. **Function** Function menus are prepared for particular occasions such as wedding receptions, company functions or birthday celebrations. They mostly consist of two to three courses and are decided by the host, who pays a set price per head. The number of people and service time is known in advance, making preparation and planning easier.
- e. **Buffet** A buffet menu is one where all the food is prepared and then presented on a table for the customers to select and serve their own food. The menu dishes are selected according to the pre-determined cost and style of the buffet, which may include finger food, breakfast buffet, seafood buffet, salad buffet or full buffet. All food is elaborately presented on platters in portion sizes and some may be glazed with a light aspic to prevent them drying out.
- f. **Cyclic** Cyclic menus operate in establishments where the same customers dine daily, e.g. hospitals, nursing homes, boarding schools and prisons. Several full day menus are

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developed for a period of time (cycle) which may last from seven to 28 days. The cycle is then repeated. Cyclic menus aim to avoid too frequent repetition of meals.

CRITERIA FOR SELECTING QUALITY INGREDIENTS

Dairy products

- check the use-by or best before date
- all packaging should be intact
- milk should have a pleasant aroma and flavour, and a consistency and colour that is typical of the type of milk
- cheese skin or rind should have no mildew or mould, cut cheese should have no dry areas or excess moisture or greasiness.

Dry goods

- check the use-by date for freshness
- products should be free from any mould, insect or weevil infestations
- packaging should be dry and undamaged
- products should be dry and free of moisture.

Fruit

Fresh:

- should have no bruising, blemishes, decay or insect damage, be of good colour, size and shape and have a fresh appearance.

Frozen:

- fruit should be frozen in pieces and not in one solid lump.

Preserved and pre-prepared products:

- packaging in a good condition, correctly labelled and within the use-by date.

Vegetables

Fresh:

- vegetables should be clean, have no soil, a good colour, crisp, and have no bruises, cuts, blemishes or signs of insect damage.

Frozen:

- vegetables should be frozen separately and not in one solid lump.

Preserved and Pre-prepared products:

- packaging in a good condition, cans not dented, correctly labelled and not past the use-by date.

General food items

- all food items should be within their use-by-date, where applicable, and of high quality
- all packaging should be intact and undamaged.

Meat, seafood and poultry

Fresh:

- products should smell fresh
- beef flesh should be bright red without excessive fat or gristle
- lamb flesh should be firm and dull red with a fine grain, fat should be evenly distributed and the bones porous
- pork flesh should be pale pink and firm with a smooth rind and white fat that is not excessive. Bacon and ham should be moist but not sticky.
- veal flesh should be pale pink and firm with little fat, cut surfaces should be moist
- offal should not have an unpleasant or unusual smell or colour and be moist but not sticky.
- poultry should have a white skin that is not sticky and firm flesh
- fish filets should be firm and translucent in colour with no bruising or discolouration
- whole fish should have bright, clear and full eyes, firm flesh that springs back when touched, scales firmly attached and bright skin.

Frozen:

- packaging and food should feel completely frozen and show no signs of thawing
- no signs of freezer burn or ice crystals
- when thawing there should be minimal liquid loss.

Preserved and pre-prepared products:

- check the use-by or best before date
- packaging should be in good condition, cans not blown, and correctly labelled.

2.2. Assembling ingredients according to the correct quantity, type and quality required

Measuring dry and wet ingredients

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It is essential to be able to measure all your ingredients accurately so that your recipes are successful and the required amount of food is produced to avoid wastage.

Dry ingredients are measured by weight, in grams (g) and kilograms (kg), and by volume, in cups (C), teaspoons (t) and tablespoons (T). Scales are used to achieve an accurate measure of weight and can also be used for ingredients other than dry goods. When using scales, check they are on zero to start with and that they are on a flat surface. Cup measures are available in a range of sizes from 1/4 cup to 1 cup. Spoon measures usually consist of 1/4 teaspoon, 1/2 teaspoon, 1 teaspoon and 1 tablespoon.

When measuring ingredients with cups or spoons, the measurement is always a level one and not heaped. This is done by filling the cup or spoon in a heaped measure and then using the back of a knife to level off the top.

Wet ingredients are measured in millilitres (ml) and litres (L) by using a measuring jug that has markings on the side. When using a measuring jug, keep it on a flat surface, slowly pour in the liquid and check it at eye level.

Selecting ingredients

Whether you are using fresh, frozen, preserved or prepared ingredients, you must ensure that you select ingredients of the highest quality. The criteria in the table below provides a useful guide to selecting quality ingredients.



Food preparation often involves the combining and mixing of different food or food materials. Important effects of the methods of combining food or ingredients are those related to palatability.

Texture and flavour are often controlled to an important degree by the skill and method employed in combining component materials.

Beating:

Beating is mixing materials briskly, lifting and dropping them with an appropriate tool. Whether done using an electric mixer or by hand with a fork, spoon, or whisk, to 'beat' is to vigorously mix, blend, or stir a mixture in a circular motion. This technique changes the consistency of the ingredient(s), from the smoothing, mixing and aerating the ingredients to incorporating air into

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egg whites or sweet cream. Rule of Thumb - 100 strokes by hand will equal about one minute with an electric mixer.

Blending:

Blending is a technique where two or more ingredients are combined so they are smooth and equally distributed throughout the mixture. A spoon, fork, rubber spatula, whisk, electric mixer with paddle attachment, food processor, blender or even bare hands can be used for this technique. Blending differs from beating in that its sole purpose is to combine the ingredients, not to incorporate air into the mixture.

Cutting-in:

Cutting-in is a technique used in pastry making (scones, biscuits) involving the mixing of a cold solid fat (butter, margarine, shortening) into dry ingredients (flour mixture) until the mixture is blended but still contains small flour-coated pieces of cold fat. This combining of the cold fat and dry ingredients must be done quickly and with a light hand so that the fat does not melt. For light and fluffy scones or biscuits, the fat should not become too soft or cut too fine. A pastry blender, two knives, fingers, food processor or an electric mixer with the paddle attachment can be used.

Creaming:

Creaming is mixing or beating technique that combines ingredients to make a uniform mixture and also incorporates air into this mixture. Softening fat by friction with a spoon, usually followed by gradual incorporation of sugar as in cake-making. The butter should be at room temperature so it incorporates the sugar sufficiently to produce a smooth and creamy batter that is light and fluffy. A whisk, wooden spoon, or electric mixer with paddle attachment can be used.

Kneading (pronounced (NEEDing):

Kneading technique used in both bread making and pastries to combine and work a dough or mixture into a smooth and pliable mass. In bread making, kneading the dough also develops the gluten strands in the flour so it adequately holds in the gases released by the leavener (yeast) to produce a bread with good volume and texture. This technique can be done by hand, using the press-fold- turn action or using a food processor or electric mixer with the dough hook.

Whipping:

Whipping is a mixing technique used to incorporate air into an ingredient or mixture (i.e. egg whites, heavy cream) to increase its volume and make it light and fluffy. This is done by vigorously beating in a circular motion using a wire whisk or electric mixer. Egg whites are often whipped and then added to cake batters to make them less dense so they have more volume when baked. Whipped heavy cream can be added to custards or sauces to make them lighter.

Whisking:

Whisking is a technique to rapidly beat or whip as much air (volume) as possible into a mixture or one ingredient (usually heavy cream or egg whites). This is accomplished by using a wire whisk or electric mixer. A whisk is made of several wires that are looped together into a teardrop shape and attached to a wooden or stainless steel handle. They come in many different sizes and shapes with the wires of various amounts, thicknesses and flexibilities. Whisks can be used to whip, blend or stir ingredient(s).

Folding:

Folding is a simple but crucial technique used when combining a light and airy ingredient into a heavier ingredient or mixture in such a way as each ingredient maintains its original volume.

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This technique must be done quickly but gently and stop 'folding' as soon as the ingredients are blended. Start by placing one quarter of the lighter mixture on top of the heavier mixture. With a rubber spatula cut down vertically through the two mixtures, sweep across the bottom, up the nearest side of the bowl, and over the top of the mixtures (go in clockwise direction). Rotate the bowl a quarter turn counter-clockwise and repeat the down-across-up-over motion. This technique is commonly used to incorporate flour into a sponge cake base and adding egg whites to a cake batter.

Marinating:

Marinating is the process of soaking foods in a seasoned, often acidic and / or liquid before cooking. The 'marinade' can be acidic with ingredients such as vinegar, lemon juice, or wine, or savory with soy sauce, brine or other prepared sauces. Along with these liquids, a marinade often contains oils, herbs, and spices to further flavor the food items. It is commonly used to flavor foods and to tenderize tougher cuts of meat or harder vegetables such as beetroot, eggplant and courgette. The process may last seconds or days. Different marinades are used in different cuisines. In Indian cuisine the marinade is usually prepared with yoghurt and spices.

Sealing:

Sealing is the sauteing or pre-cooking roast, to develop colour and flavour.

Stirring:

Stirring is mixing materials with an appropriate tool, such as a spoon by a circular motion in contact with the pan (as in stirring white sauce). Generally this is a gentle movement but changed to suit different dishes, as when used to prevent sticking or burning in halwas and toffees. If used too vigorously, it is likely to drive out any air or other gas previously enclosed as a raising agent.

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Self check**Question****Instruction 1 -Fill in the blanks**

1. Cutting into even sized pieces or cubes is called
2. is removing the outermost skin of fruits or vegetables.
3. is reducing large piece of food to small particles or thin shreds.
4. is cutting of fruits and vegetables into long narrow pieces.
5. is reducing to small fragments by crushing.
6. separates wanted components from unwanted materials using a tool such as mesh net.
7. is mixing of air with ingredients for softening.
8. is the process of soaking foods in a seasoned liquid before cooking.

2. True or False

1. Cutting into very fine pieces with a knife is called shredding.
2. Use soap or detergent to wash fruits and vegetables.
3. Mincing is a method in which food ingredients are finely divided.
4. Apple sauce is made by puréeing apple.
5. Skimming is a method through which unwanted constituents are removed from milk by heating.
6. Sprouting is the practice of soaking, draining followed by keeping seeds moist until the seeds germinate.
7. Kneading is a technique used in pastry making.
8. Marinade is used to flavour foods and to tenderize tougher cuts of meat or harder vegetables.

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Self check1	Answer
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1.
 1. Dicing
 2. Peeling.
 3. Grating
 4. Shredding
 5. Grinding
 6. Sieving
 7. Creaming
 8. Marinating
2.
 1. True
 2. False
 3. True
 4. True
 5. False
 6. True
 7. False
 8. True

3.1.Preparing food items for menus according to correct weight, amount and number

Preparation of ingredients is popularly termed as *Mise-en-place*. *Mise-en-place* (pronounced *mizāplas*, is literally "set in place"), it is a French phrase defined by the Culinary Institute of America as "everything in place". It is used in kitchens to refer to the ingredients, such as cuts of meat, relishes, sauces, par-cooked items, spices, freshly chopped vegetables and other components that a cook requires for the menu items that they expect to prepare.

Food items to be prepared:

- ✚ dairy products, including milk, yoghurt, cheeses and alternatives, e.g. soy products
- ✚ dry goods, such as flours, sugars, pastas and rice
- ✚ standard fruit and vegetables
- ✚ general food items such as sauces, condiments and flavourings, garnishes, coatings and batters may include the use of:
 - ✓ meat, seafood and poultry that may be fresh, frozen, preserved or pre-prepared meat products such as standard cuts, sausages, hams and salami

Recipes are reviewed, to check for necessary ingredients and equipment. Ingredients are measured out, washed, chopped and placed in individual bowls.

Preparing the *mise en place* ahead of time allows the chef to cook without having to stop and assemble items, which is desirable in recipes with time constraints. Solid foods which are to be mixed have to be reduced into sizes which will allow them to combine readily. A certain amount of preparation is thus mandatory. the major preparation techniques of food item includes:

- | | |
|------------------------|-------------------------|
| ✚ Washing | ✚ Puréeing |
| ✚ Cutting | ✚ Sieving |
| ✚ Peeling and Scraping | ✚ Refining |
| ✚ Paring | ✚ Skimming |
| ✚ Grating | ✚ Rendering |
| ✚ Mincing | ✚ Filtration |
| ✚ Slicing | ✚ Julienning |
| ✚ Shredding | ✚ Sprouting |
| ✚ Slitting | ✚ Flotation |
| ✚ Grinding | ✚ Evaporation/Reduction |
| ✚ Mashing | ✚ Homogenization |
| ✚ Pressing | ✚ Emulsification |

3.1. Cleaning, peeling and preparing vegetables and fruits

Washing, peeling and trimming of fruit and vegetables, along with cutting, are common tasks in the kitchen and will make up most of your mise en place tasks. Because most vegetables are grown either under the ground or just above the surface, they tend to have a lot of foreign matter such as dirt, soil, sand and often insecticides and chemicals on them. Therefore it is very important to ensure that all fruit and vegetables are thoroughly washed in cold water to remove insecticides, chemicals, pests and soil. Some vegetables need to be pulled apart and/or washed several times to ensure all insects and dirt are removed.

Root vegetables such as potatoes should be scrubbed with a stiff brush under cold running water before peeling. Soaking in salted water may be appropriate for some vegetables, such as cauliflower and broccoli, to kill any insects caught within the flowers.



Delicate fruits need to be handled carefully to avoid bruising them. After washing, some fruit and vegetables need to be peeled and trimmed and have their strings, peel, pith, stems or eyes removed. Peelings are the outside skins, tops and tails, while trimmings are the edible off cuts from fruit and vegetable preparation. Peelings are usually discarded, while trimmings are generally saved for use in stocks, sauces, mirepoix and purees.

Specific peeling techniques

Peeling tomatoes

To peel a tomato without damaging its flesh, it needs to be blanched in boiling water.

1. Using a paring knife, cut a small cross on the bottom and remove the eye of the tomato.

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2. Drop the tomato into boiling water for 10–15 seconds, depending on ripeness.
3. Refresh it immediately in cold water.
4. Peel the skin away with a paring knife.

If some of the flesh comes away with the skin it means the tomato was blanched for too long.

Crushing garlic

Crushing garlic should be one of the last mise en place tasks as its strong aroma can be easily transferred to other foods.

1. To peel a garlic clove, place it on the chopping board and with the heel of your palm on the side of the knife blade, press firmly. This breaks the peel and allows the clove to be removed.
2. Finely chop the garlic using a chef's knife and then add salt in the ratio of one quarter salt to one clove garlic. Salt is used to draw out the moisture from the garlic to help it form a paste.
3. Use the side of the knife blade to grind the garlic and salt mixture until it forms a paste.
4. Store the garlic paste in oil.



Segmenting fruit

Citrus fruits are commonly cut into three shapes: peeled slices, wedges and segments. To segment a fruit:

1. Cut off both ends of the fruit to expose the flesh.
2. Stand the fruit on one of the cut ends on the chopping board and using your knife in a downward direction that follows the shape of the fruit, cut away the peel and pith.
3. Hold the fruit in one hand over a bowl and use your paring knife to remove each segment by cutting along each side of the segment close to the membrane.
4. Place the segments into a bowl and squeeze the juice from the core over the top.

Cutting techniques for fruit and vegetables

Cutting techniques for fruit and vegetables can be divided into two categories:

1. **Precision cutting** – the cutting of food into uniform shapes and sizes, e.g. julienne, brunoise, jardinière, paysanne, macedoine.
2. **Rough cutting** – the coarse cutting of foods that are generally used for flavour only and not for service, e.g. mirepoix.

Julienne

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Julienned vegetables are cut into long, thin, match-like sticks, 3mm × 3mm × 40mm. They are mostly used as a garnish. To cut a carrot into julienne:

1. Wash, top and tail the carrot.
2. Cut into 40 mm lengths.
3. Stand one length on its end and square off the sides.
4. Lay the carrot onto its side and slice into 3 mm slices.
5. Place several slices together and cut them into 3 mm strips.

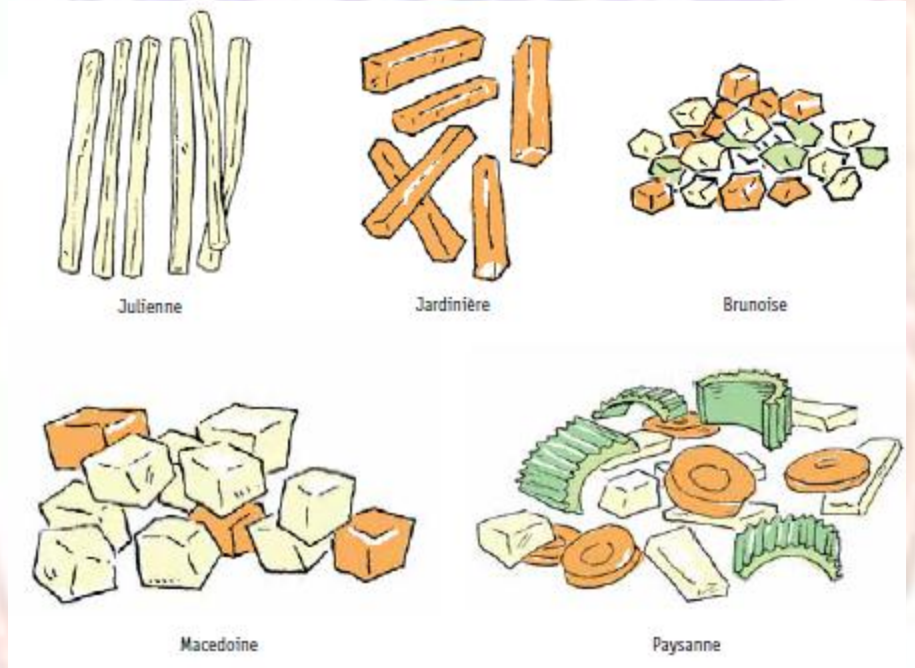
Brunoise

Brunoise is a very fine 3 mm dice, used as a garnish. To cut brunoise, begin by cutting into julienne, then place several julienne strips together and cut into 3 mm cubes.

Paysanne

Paysanne is thin 5 mm slices of vegetables, cut into 15 mm shapes of squares, triangles or rounds and used as a garnish for soups. To cut paysanne of vegetable:

1. Wash and peel vegetables such as carrot, turnip, leek, potato and celery.
2. Cut each vegetable into a different shape that is 5 mm thick and 15 mm wide.



Macedoine

Macedoine is an 8 mm dice commonly used in fruit salads. To cut macedoine of apple:

1. Wash, peel and core the apple and place in acidulated water.
2. Stand the apple on its end and square it off.
3. Cut into 8 mm slices.
4. Place the slices on the board and cut into 8 mm strips.
5. Place the strips together and cut into 8 mm cubes.

Jardinière

Jardinière is vegetable batons 4 mm x 4 mm x 20 mm, commonly used as a garnish. To cut jardinière, follow the same procedure as for julienne, but instead cutting 20 mm lengths and then 4 mm slices and 4 mm strips.

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Turning

Turning is the process where root vegetables of different sizes are made into the same sized barrel shape. This is done to result in even cooking and for presentation.

To turn a potato:

1. Wash, peel and wash a potato and place into cold water.
2. Cut the ends off the potato squarely.
3. Hold the potato in one hand and with your turning, or paring, knife, cut using a slight curving action from top to bottom.
4. Rotate the potato and continue cutting in a curved action until you have a barrel shape with six to eight smooth, even sides.

To turn a carrot:

1. Wash and peel the carrot and cut into lengths.
2. Use the same action as for a potato to shape each piece into even sized barrels.

Dicing

Dicing is the cutting of fruit and vegetables into even cubes. Brunoise and macedoine are examples of dicing. Dicing an onion requires a specific method as it has layers and is not a solid piece.

To dice an onion:

1. Peel the onion and cut it in half from stem to root, leaving the root end intact.
2. Place the cut surface on the chopping board and use the tip of your chef's knife to make cuts 2mm apart along the length of the onion. Do not cut through the root.
3. Make 3–4 cuts horizontally, at right angles to the other cuts, again, not cutting through the root.
4. Slice the onion at 2mm intervals. The slices that fall will be a small dice.



Mirepoix

Mirepoix is a mixture of equal quantities of roughly cut carrots, celery and onions. It is used to flavour stocks and sauces or as a bed for roast meats.

3.2.Preparing dairy products required for menu itemPreparing dairy

Skimming:

Skimming is removing a floating layer by passing a utensil under it (ladle) as in skimming cream from milk.

Homogenization:

Sub-dividing large drops into smaller ones by forcing them through a small aperture under great pressure as in homogenizing the fat in cream, homogenized milk etc.

Emulsification:

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Dispersing one liquid in another in which it is insoluble or unmiscible such as water and oil with the addition of an emulsifier; e.g. vegetable gums. If the dispersion is to be temporary, a stabilizer, which coats the droplets of the dispersed phase, must be incorporated, e.g. in mayonnaise.

Clarifying Butter

Slowly warm the butter in a saucepan over low heat without boiling or agitation. As the butter melts, milk solids rise to the top as a foam and the water sinks to the bottom. When the butter is completely melted, skim the milk solids from the top.

When all of the milk solids have been removed, ladle the butterfat into a clean saucepan, being careful to leave the water in the bottom of the pan. The clarified butter is now ready to use.



3.4. Measuring, sifting where appropriate and using dry goods as required for menu items

Dry goods

Dry goods include foods such as flours, sugars, pastas and rice. Sifting is a common preparation technique used with some dry goods, especially flours. It is the passing of dry ingredients through a fine, mesh sifter to remove any foreign objects, to add air and remove lumps.

Weighing and measuring all ingredients

To use a balance scale to weigh an ingredient:

1. place an empty container on the left
2. then set a counterbalance to that container on the right
3. use weights and the sliding beam weight to add an amount equal to the amount of ingredient needed

Place the ingredient on the left side of the scale until the two platforms balance required colour is reached.

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3.5.handling correctly all food items

General food items

General food items include sauces, condiments and flavourings, garnishes, coatings and batters. Some establishments will purchase these pre-prepared while others will prepare them fresh.

Clarified butter

Also called ghee, clarified butter has had all the milk solids removed, allowing it to be heated to a higher temperature. To clarify butter, melt it in a saucepan over low heat, skim off any scum or froth that comes to the surface and then carefully strain through filter paper, leaving the sediment behind. As it can be heated to a higher temperature before it burns, clarified butter is a useful medium for frying and sautéing. Croutons for example, are commonly fried in clarified butter.

Roux

A roux is a cooked mixture of equal quantities of fat and flour. It is the foundation of most sauces and depending on the length of time it is cooked, it is white, blond or brown. A roux is never used by itself, but added to other liquids and brought to the boil to thicken them. To prepare a roux, melt fat in a saucepan, add an equal amount of flour and stir over moderate heat until the

Concassé

Concassé is peeled and seeded tomato cut into 1 cm squares. After the tomato is peeled, it is cut in half horizontally and all the seeds are removed before the flesh is diced into 1 cm squares. Concassé may be cooked or used raw. Common [menu items](#) incorporating concassé include; bruschetta, parmigiana and pastas. Once prepared, concassé should be covered and stored in the coolroom until use.

Chopped parsley

Chopped parsley is used in compound butters, duxelles, sauces, garnishes and stuffings. To chop parsley:

1. Separate the parsley from the stem and wash in a bowl of cold water.
2. Finely chop the parsley with a chef's knife.
3. Place the parsley in a clean cloth, fold over and wash under running cold water to remove the chlorophyll.
4. Squeeze out the water to leave the parsley dry and loose so it can be sprinkled if necessary.

Chopped parsley should be covered and stored in the coolroom. It is important to keep it dry.

Duxelles

Duxelles is a mixture of finely chopped mushrooms and onions that is cooked in butter until most of the moisture has evaporated. It is then seasoned with salt and pepper and finished with

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chopped parsley. Duxelles is commonly used in vegetable and meat stuffings, for example stuffed capsicum or zucchini. If not being used immediately, duxelles would be stored in the coolroom.

Croutons

Croutons or sippets are small pieces of diced bread used for garnishing soups and salads. They are prepared by removing the crusts from bread, cutting into 8mm cubes, lightly frying until golden brown and then draining on absorbent paper. Croutons can also be cooked in the oven. Caesar salad is a well known menu item that incorporates croutons. Croutons should be stored in an airtight container at room temperature, to protect them from moisture which will make them soggy.

Bouquet garni

A bouquet garni is a tied-together bundle of herbs and flavouring agents used to impart flavour to sauces, stocks, soups and stews. The ingredients are tied together to enable them to be easily removed before service. A bouquet garni consists of thyme, parsley stalks, celery, bay leaf and leek. Bouquet garnis are generally made prior to use, however, if preparing them in advance, they would be stored in the coolroom.

Marinades

Marinades are used to impart flavour, tenderise and preserve. They may be cooked or uncooked, liquid or dry. Dry marinades are rubbed onto the food, while liquid marinades have the food steeped in them. Food that is being marinated is stored in the coolroom. If you are using the marinade liquid to serve as a sauce with the food, it is essential to boil the liquid to kill any micro-organisms. Common marinades include soy sauce and red wine

Garnishes

A range of simple and complex garnishes such as twists, curls, wedges, fans, roses, turning, scoring and croutons can be used to add interest and colour to a dish.

Batters

Batters are flour mixtures that contain enough liquid to be beaten or stirred. They can form the basis of a meal, such as pancakes, crepes, waffles, scones, muffins, or they may be used to coat pieces of food before frying, such as fruit fritters, fish and vegetables.

Batters may be of a pouring, dropping or coating consistency and different types may contain yeast, beer, flour, egg and milk. Common examples of batters include beer, tempura, crepe, pancake and waffle. All foods fried in batter need to be served immediately so they do not lose their texture, appearance or crispness. Appropriate equipment to use when preparing batters includes: bowls, wooden spoons, ladles, crepe pans, waffle irons, whisks and sifters.

3.1.handling Correctly all food items

All foods must be stored and handled correctly to minimise the rate of deterioration. Fresh foods of a high quality should be purchased as they will last longer than poorer quality foods. Don't order excess stock as it may deteriorate before you can use it. All stock should be rotated so older foods are used first. When preparing foods, minimise wastage when peeling and trimming by only cutting off what is not needed. Correct food preparation will also minimise wastage that may occur through disposal of foods due to incorrect and/or unsafe preparation.

Use of off-cuts

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Off-cuts or trimmings from foods should not be discarded but saved for use as mirepoix or in stock pots. Some off-cuts can also be used in soups and stews. Using off-cuts reduces waste and is also cost efficient for the establishment.



3.6.Preparing food items in the required form and timeframe

Prepare meat, seafood and poultry

Standard cuts

Meat

Standard cuts for meat include:

1. **rump** – cut from the hindquarter into steaks or roasts
2. **T-bone** – cut from the centre of the short loin. It includes the top loin and tenderloin muscles and the T-shaped bone, hence the name
3. **fillet**– cut across the grain from the tenderloin muscle and is the most tender cut.



Preparing meat

Meat is the edible flesh from cattle, sheep and pigs. It also includes game and specialty meats such as emu, crocodile and kangaroo.

Meat Preparation techniques

When purchasing meat, cuts should be chosen that will give the greatest number of portions after trimming. All portions must be weighed and cut accurately to minimize waste and cost.

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- ✚ Cutting and trimming-trimming is the cutting of meat to a certain size and shape and the removal of all excess fat to improve its presentation. After trimming, meat needs to be cut into useable cuts such as steaks, chops, schnitzel, strips and cutlets. Some establishments purchase their meat pre-cut and sliced from their supplier
- ✚ **Mincing** - the process of putting boneless, trimmed pieces of meat through a mincing machine or grinder.
- ✚ **Tenderising**– tough meat can be tenderised by ageing (hanging in the cool room for several days or weeks), hammering with a mallet to break up the muscle fibres, mechanical tenderisation using a machine, applying chemicals to break down the cell structure and mincing.
- ✚ **Curing** – the process of adding salt to meat to preserve it and extend its shelf life.
- ✚ **Weighing and portioning** – to accurately portion meat, a cook's knife and a set of scales are used. It is important for cost, portion control and wastage factors that meat is portioned accurately. Some establishments purchase their meat pre-cut or pre-portioned.

Seafood

Standard cuts for seafood include:

1. **fillet** – fish fillets have the skin and bones removed
2. **cutlet**– fish cutlets are sections of fish that have been cut vertically. Prawn cutlets have the head and shell removed, leaving the tail intact.



Preparing seafood

Seafood includes all edible animals from the sea, such as fish, prawns, lobsters, oysters, squid, pippies, octopus, Balmain Bugs, crabs, scallops, mussels, abalone and cuttlefish.

Seafood Preparation techniques

- ✚ **Scaling** – to scale a fish, hold it by the tail and with the back of your knife or a fish scaler, scrape over the skin from the tail to the head. This will lift the scales and dislodge them from the skin. Rinse the fish under cold running water to remove any dislodged scales. Be careful as scales tend to fly everywhere.
- ✚ **Gutting** – to gut a fish, insert the point of your knife, or scissors, into the vent end of the fish and cut towards the head along the belly. Place the fish on its side, scrape the gut out with your knife and rinse the cavity thoroughly with cold running water.

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- ✦ **Cleaning** – once a fish has been caught it is important to gut it as soon as possible. Gutting, scaling and removal of fins, which is done with sharp scissors, are all part of the cleaning process for fish. All seafood should be thoroughly washed under running cold water before preparation.
- ✦ **Removal of skin** – skin can be removed from fillets if required. Place the fillet on your chopping board skin side down. Hold the tail end and make an incision between the skin and fillet. Carefully work your knife towards the head end while pulling the skin tightly.
- ✦ **Filleting** – both round and flat fish can be filleted. Round fish yield two fillets and flat fish yield four. A sharp, flexible filleting knife should be used.
 - ✓ To fillet a round fish, lay the fish on its side and make an incision behind its gills angling into the back of the head. Cut along the backbone on the top side of the dorsal fin from head to tail, then turn the fish over and repeat on the other side. Any bones left in the fillet can be removed with fish tweezers.
 - ✓ To fillet a flat fish, place the fish on a board and make a cut around the head. Cut in a straight line from the head to the tail to create two separate sections. Carefully put your knife under one fillet and cut between the flesh and bone to remove it. Remove the second fillet in the same way and then turn the fish over and repeat on the other side.

Poultry

Standard cuts for poultry include:

1. **breast fillet** – the breast piece with the skin and bones removed
2. **thigh fillet** – the portion of the leg above the knee joint which has the skin and bones removed
3. **tenderloin** – the long and slender cut from under the breast
4. **drumstick** – the lower portion of the leg quarter, between the knee joint and hock
5. **wing** – the wing portion of the bird, comprising three sections of: the drumette, mid-section and tip.



Preparing poultry

Poultry is the meat obtained from birds such as chicken, turkey, duck, goose, guinea fowl and pigeon.

Poultry Preparation techniques

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- ✦ **Trussing** – involves tying a whole chicken with string to improve its appearance and ensure even cooking. This can be done with a needle, string or skewers.
- ✦ **De-boning** – involves the removal of bones from the bird.
- ✦ **Slicing** – poultry is often cut into smaller cuts that are suitable for different methods of cookery.
- ✦ **Portioning** – the most common cuts for poultry are: whole, supremes (breast), legs, thigh (top part of the leg), drumstick (lower leg) and wings. These portions may be purchased already cut from the supplier or can be portioned by the chef.
- ✦ **Stuffing** – is the placing of a mixture (usually seasoned, moist breadcrumbs), inside the washed and trimmed cavity of the bird.
- ✦ **Marinating** – adds flavour and moisture and usually creates a more tender product. Chicken is an ideal food to marinate with rubs, liquid, glazes and sauces.



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Self check3**Question**

Instruction- give short answer

1. What is mise-en -place?
2. List Food items to be prepared
3. _____ is a mixture of equal quantities of roughly cut carrots, celery and onions.
4. _____ is a cooked mixture of equal quantities of fat and flour.

Self check3**Answer**

1. "everything in place".
2. Food items to be prepared:
 - ✚ dairy products, including milk, yoghurt, cheeses and alternatives, e.g. soy products
 - ✚ dry goods, such as flours, sugars, pastas and rice
 - ✚ standard fruit and vegetables
 - ✚ general food items such as sauces, condiments and flavourings, garnishes, coatings and batters may include the use of:
 - ✓ meat, seafood and poultry that may be fresh, frozen, preserved or pre-prepared meat products such as standard cuts, sausages, hams and salami
3. Mirepoix
4. Roux

4.1. Selecting and using suitable knives and equipment for food portioning

Equipment for meat preparation

The following equipment is commonly used when preparing meat.

- + **meat mallet** - used to flatten and tenderise meat
- + **mincer** – a machine through which meat is passed to turn it into mince (finely shredded pieces)
- + **meat slicer** – a machine which slices meat to the desired thickness; commonly used in delicatessens to slice ham
- + **knives** – cook's knife (for slicing, chopping and portioning), meat cleaver (for chopping and cutting through meat with bones), and carving knife and fork (to carve cooked meats off the bone).

A fine metal-mesh glove can be worn as a safety precaution when preparing meat. It can be worn on the free hand when using knives or a cleaver and should be worn when using mincing or slicing machines.

Equipment for seafood preparation

The following equipment is commonly used when preparing seafood.

- + **fish scaler** – used to remove scales from the skin of fish
- + **filleting knife** – used to skin and fillet fish
- + **kitchen scissors** – used to cut seafood.

Equipment for poultry preparation

The following equipment is commonly used when preparing poultry.

- + **Knives** – boning (to get as close as possible to the bone when cutting raw poultry), cook's (for slicing, chopping and portioning), and carving (to carve cooked poultry off the bone).
- + **Poultry shears** – used to cut poultry into portions.

4.2. Portioning food ingredients accurately, according to size, weight and required menu items

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Portion is The amount of food that is served to one person is referred to as a portion. Portion control is The standardisation of the size of a meal. It ensures all customers receive a portion of the same size.

Food ingredients to be portioned may include:

- + Meat
- + Seafood
- + Poultry
- + Pastry
- + Dough
- + Fruit
- + Vegetables

4.3. Storing prepared and portioned foodstuffs safely

Storage of fruit and vegetables after peeling

Some fruit and vegetables are prone to spoilage by oxidation after peeling. This results in the fruit or vegetable turning brown due to a reaction with the oxygen in the air. To prevent this from occurring, some fruit and vegetables need to be stored in a particular way immediately after they are peeled. Storage methods include:

- + Immersion in water, e.g potatoes
- + Application of lemon juice, e.g eggplant
- + Immersion in a mixture of water and lemon juice (acidulant water), e.g apples
- + Immersion in brine (salted water)

Storage and handling of dairy products

Dairy foods are those that are derived from milk and include: butter, cheeses, cream, sour cream, yoghurt, ice cream and milk. They also include alternatives such as soy products. All dairy products are perishable and need to be stored in the cool room or refrigerator at a temperature between 1°C and 4°C, except ice-cream which needs to be stored in a freezer below -18°C. When handling dairy products it is important to minimise the time they spend in the danger zone of 5–60°C. Dairy products have a variety of uses in food preparation including: desserts (puddings, cakes, cheesecakes), sauces (béchamel), soups (cream of mushroom), egg dishes (quiche, frittata, omelette), main meals (in the cooking of fish, pasta or vegetables), cold drinks (milkshakes, smoothies, iced chocolate) and hot drinks (hot chocolate, tea and coffee).

Storage of meat, seafood and poultry

Meat, seafood and poultry are highly perishable foods and must be stored using high standards of hygiene to minimise the risk of food spoilage and contamination and food wastage. Fresh meat should be stored between -1°C and 3°C for two to three days for smaller cuts and up to ten days for larger cuts. Frozen meat should be kept between -18°C and -24°C and can be stored for three to six months. When storing fresh meat, place pieces in single layers on trays covered with plastic wrap, with the fat side upwards.

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Don't mix different types of meat and never place raw and cooked meats together. Cooked meat should be quickly cooled to below 5°C and then stored in the coolroom between -1°C and 3°C and used within three days. Fresh poultry should also be stored on covered trays in the refrigerator between -1°C and 3°C where it can last three days.

Frozen poultry should be individually packaged and stored for up to three months between -18°C and -24°C. Once a frozen item has thawed it shouldn't be re-frozen. Cooked poultry should also be quickly cooled to below 5°C and then stored in the coolroom between -1°C and 3°C. Fish should be stored in a fish fridge or in the coldest section of the cool room. They should only be stored for one to two days, at a temperature of 1°C. Fish should be stored on trays of crushed ice in the refrigerator. If fish are

to be frozen they should be wrapped in plastic and kept between -18°C and -24°C. All items should be labelled and dated and a stock rotation system such as first in, first out (FIFO) should be maintained.

Self check4	Question
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Instruction- give short answer

5. List equipments required for meat preparation
6. List equipments required for seafood preparation
7. List equipments required for poultry preparation
8. What are food ingredients to be portioned?

Self check4	Answer
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1. meat mallet,mincer,meatslicer,knives
2. fish scaler,filletingknife,kitchen scissors
3. Knives,Poultry shears

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4. Meat, Seafood, Poultry, Pastry, Dough, Fruit, Vegetables



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5.1. Using the quantity, weight and portions of ingredients to minimize wastage and maximize profitability of meals prepared

Hospitality establishments need to continually look at the amount of waste they produce and examine ways to minimise this waste to save money and also help save our environment. All hospitality establishments should aim to cut down on their amount of waste. This can be done by using the following techniques:

- ✚ **Correct portion control** This will avoid wasting food and money. Serves should be weighed and portioned accurately to avoid surplus food. If meals are consistently not being finished by customers, the portion size may need to be reduced.
- ✚ **Correct storage, handling and preparation of foodstuffs** All foods must be stored and handled correctly to minimise the rate of deterioration. Fresh foods of a high quality should be purchased as they will last longer than poorer quality foods. Don't order excess stock as it may deteriorate before you can use it. All stock should be rotated so older foods are used first. When preparing foods, minimise wastage when peeling and trimming by only cutting off what is not needed. Correct food preparation will also minimise wastage that may occur through disposal of foods due to incorrect and/or unsafe preparation.
- ✚ **Use of off-cuts** Off-cuts or trimmings from foods should not be discarded but saved for use as mirepoix or in stock pots. Some off-cuts can also be used in soups and stews. Using off-cuts reduces waste and is also cost efficient for the establishment.
- ✚ **Waste minimization**
 - ✓ Correct measurement and calculation
 - ✓ Recycling
 - ✓ Using recyclable material
 - ✓ Resource efficiency

5.2. Preparing the correct amount of food items according to expected numbers of customers

Portion control-It ensures all customers receive a portion of the same size. it includes:

- ✚ Using correct utensils, measures and equipment's to prepare and serve food
- ✚ The use of standard recipe
- ✚ Specific meal and component size
- ✚ Plating menu items uniformly

Self check 5

question

Instruction- give short answer

9. How can we minimize the amount of food waste?
10. list things which can be ensured by portion control

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Self check5**answer**

1. By

5. Applying Correct portion control
 6. Applying Correct storage, handling and preparation of foodstuffs
 7. Use of off-cuts
 8. Waste minimization
2. Portion control-ensures allcustomers receive a portion of the same size.it includes:
- ✚ Using correct utensils,measures and equipment's to prepare and serve food
 - ✚ The use of standard recipe
 - ✚ Specific meal and component size
 - ✚ Plating menu items uniformly

6.1. Using energy and water resources efficiently

In order to Reduce food preparation costs and negative environmental impacts, you have to:

- ✚ Use energy and water resources efficiently when cleaning equipment and organising and preparing food to reduce costs and negative environmental impacts.
- ✚ Save reusable by-products of food preparation for future cooking activities.

6.2. Saving re-usable by-product of food preparation for future cooking activities

Reusable by-products may include:

- ✚ meat and fish off cuts
- ✚ bones and trimmings
- ✚ fruit peelings and off cuts
- ✚ vegetable peelings and off cuts
- ✚ unused portions of:
 - ✓ fruits
 - ✓ vegetables
 - ✓ seafood, meat and poultry flowers
 - ✓ garnishes
 - ✓ accompaniments
 - ✓ batter
 - ✓ dough
 - ✓ pastry
 - ✓ fillings
 - ✓ sauces and dips
 - ✓ eggs
 - ✓ coconut cream and flesh
 - ✓ combined spices
 - ✓ pastes

the wise use and saving of those Reusable by-products will reduce the cost of food preparation.

6.3. Safely dispose of all kitchen waste and hazardous substances to minimize negative environmental impacts

Kitchen waste and hazardous substances may include Any used or out of date ingredient or food item such as:

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- # cooking oils
 - # animal fat
 - # ghee
 - # dairy products, including milk, yoghurt, cheeses and. soy products
 - # dry goods, such as flours, sugars, pastas and rice
 - # fruit and vegetables
 - # general food items such as sauces, condiments and flavorings, garnishes, coatings and batters
 - # meat, seafood and poultry
 - # meat products such as standard cuts, sausages, hams and salami
- Any cleaning agent or chemicals.



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Self check6**question**

Instruction- give short answer

1. List some re-usable by-products in a kitchen
2. List Kitchen waste and hazardous substances

Self check6**answer**

1. Reusable by-products may include:
 - ✚ meat and fish off cuts
 - ✚ bones and trimmings
 - ✚ fruit peelings and off cuts
 - ✚ vegetable peelings and off cuts
 - ✚ unused portions
2. Any used or out of date ingredient or food item such as:
 - ✚ cooking oils
 - ✚ animal fat
 - ✚ ghee
 - ✚ dairy products, including milk, yoghurt, cheeses and. soy products
 - ✚ dry goods, such as flours, sugars, pastas and rice
 - ✚ fruit and vegetables
 - ✚ general food items such as sauces, condiments and flavorings, garnishes, coatings and batters
 - ✚ meat, seafood and poultry
 - ✚ meat products such as standard cuts, sausages, hams and salami Any cleaning agent or chemicals.

ANNEX

1. reference books

1.1. *Cambridge hospitality, Second Edition*



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