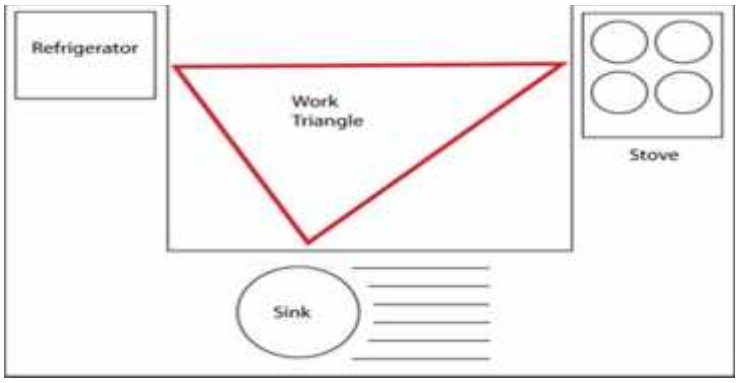
Kitchen Arrangement

The kitchen is typically the most used room in any house. An efficient kitchen is typically a key point in having a happy life. The efficiency of a kitchen can depend more on how it is arranged than the amount of space it has. There has to be a natural work flow between the different work centers.

Work triangle

The main working functions in a home kitchen are carried out between the cook top, the sink and the refrigerator. These three points and the imaginary lines between them, make up what kitchen experts call the "work triangle". The idea is that when these three elements are in close (but not too close) proximity to one other, the kitchen will run efficiently.

Illustration of the work triangle.



Kitchen Work Triangle Basics

- Each leg of the triangle should be between 4 and 9 feet
- The total of all three legs should be between 12 and 26 feet
- No obstructions (cabinets, islands, etc.) should intersect a leg of the work triangle
- Household traffic should not flow through the work triangle

In the traditional kitchen the three main work sites are:

- Refrigerator - the cold storage work site
- Sink - the cleaning/preparation work site
- Stove - the cooking work site

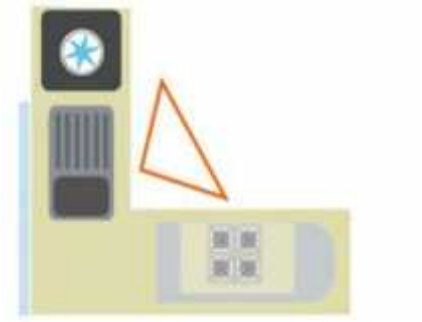
Types of kitchen arrangements

Below are the 5 types of kitchen arrangement and their respective diagram so you could have an idea of what each will look like. Choose what's best for you depending on the amount of space around your kitchen area. They include; L-shaped, U-shaped, Galley type, Island type, and Single-line type.

1) **L - Shaped Arrangement**

This is a very popular kitchen arrangement ideal for family kitchen or for entertaining guests as it can accommodate chairs and table in the same room. The kitchen also benefits from lack of through-traffic when using two adjacent walls. The sink, `cook top and refrigerators should be separated by a preparation area.

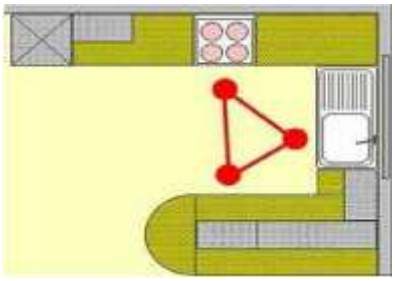
Illustration diagram



2) **U - Shaped Arrangement**

Using three full walls of a room, the u-shaped kitchen arrangement can offer the perfect working kitchen. The refrigerator, cook top, and sink can be spaced out for total efficiency and convenience. This is great news for those who take their cooking seriously as it provides the best work flows with the shortest distances around the kitchen. This arrangement also allows for large amounts of worktop and storage space.

Illustration diagram

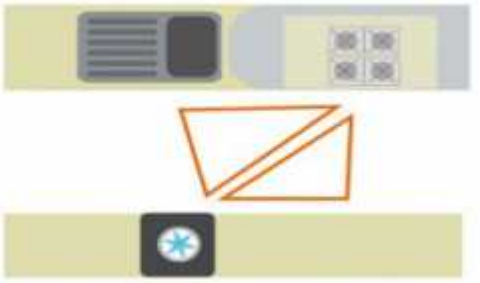


3) **Galley Arrangement**

This is the choice of many professional chefs because it offers the most efficient use of space. The two rows allow ease in moving between activity areas and can be easy as turning around. If the corridor is open at both ends, this can cause traffic congestion and this type of arrangement is not ideal.

Make sure there is enough room for opposite drawers to be open at the same time (at least 1.2m). Cleaning and cooking areas must be on the same side to prevent the risk of accidents while moving hot pans between the sink and cook top.

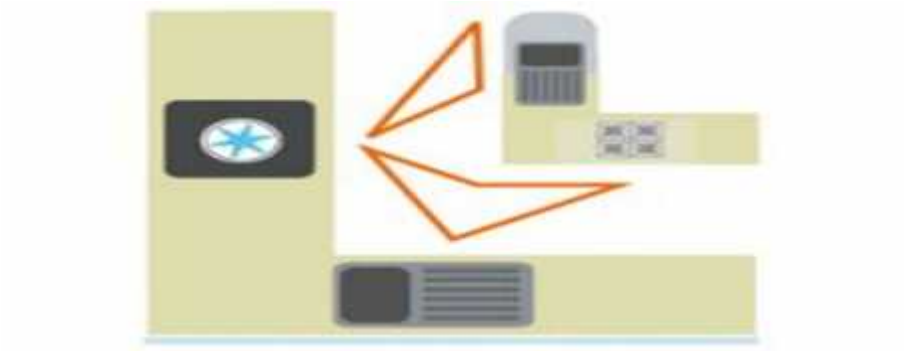
Illustration diagram



4) Island Kitchen Arrangement

A very popular kitchen arrangement and this is perfect if you plan to entertain. An independent island unit can face a dining or living area, allowing the cook to socialize while preparing. In terms of the working space of the kitchen, a sink provides the optimal arrangement Otherwise; cooking ranges with a canopy over the island can form a stunning focal point to the kitchen.

Illustration diagram



5) Single-Line Arrangement

This is smart and simple solution for narrow rooms, ideally with one small wall over three meters long without windows or doors. However, this shape of kitchen causes the longest journey distances since you often have to walk from one end of the room to the other. Therefore,

it can be good idea to situate the sink in the middle of the line with adequate space separating it from the range or oven.

Illustration diagram

FOOD PREPARATION AND COOKING

METHODS OF COOKING

There are basically two methods of cooking food i.e.

1. ***Moist heat method***
2. ***Dry heat method***

Moist heat methods

- Boiling
- Steaming
- Stewing
- Simmering
- Braising
- Pressure cooking
- Poaching

Dry heat methods

- Grilling
- Baking
- Roasting
- Microwave cooking

Reasons for cooking food

1. To destroy pathogenic (harmful) micro-organisms present in the food.
2. To preserve the food from natural and microbiological decay.
3. To destroy natural toxins (poisons) in foods e.g. red kidney beans must be boiled for at least fifteen minutes to destroy the natural toxin they contain.
4. To aid digestion e.g. the coagulation of eggs protein enables it to be broken down efficiently by gastric enzymes.
5. To make it easier to eat e.g. cooking meat tenderizes it, thus making it easier to chew and swallow.
6. To make the food more appetizing and attractive e.g. cooked fish or offal is more appetizing than raw.
7. To enhance the flavour of food e.g. roasting meat develops extractives which add to the flavor.

8. To give variety in the diet e.g. potatoes can be fried, boiled, creamed, roasted, chicken can be casseroled, fried, roasted, and boiled.
9. To reduce bulk, e.g. green leafy vegetables reduce considerably when cooked so that more can be eaten.
10. To provide hot food in cold climates.
11. Necessary for some cooking processes e.g. thickening sauces, dissolving gelatin, preparing of cakes and biscuits.

Factors to consider before selecting any method of cooking;

- The particular food to be cooked. e.g. most cakes are baked and only a few are steamed
- The time available to cook the food
- The type of fuel available
- The needs of the individual being catered for e.g. state of health, age.
- Individual preference
- The occasion
- Skill of the cook.

Moist Heat Methods of Cooking

Heat is applied through the medium of a liquid. Relatively low temperatures are used which may prolong the cooking time of some food. The liquid medium may be water, steam, stock, milk, fruits juice, wine or bear.

Boiling

This is a moist method of cooking where the food is wholly or almost covered with the cooking liquid. By this method / process food is covered by liquid at 100^0C or 200^0F. The pan should have a well-fitting lid to reduce evaporation because the vapour is important in the cooking of foods.

Aims of cooking

Boiling is intended to keep in as many of the natural juices of the food as possible while softening tissues right through therefore meat is kept in large piece and plunked into boiling.

The heat coagulates the albumen present in the tissues of the meat and forms a coating which prevents the juices from escaping.

Advantages

- The transfer of heat by convention is fairly rapid and efficient hence food becomes ready quickly
- Boiled food is easily digested
- The water used for boiling can be used as a basis for sauce, stock, soup or gravy.
- It's a simple method needing little attention
- Boiled foods are suitable in all healthy conditions for both children and aged sine no fats are added
- Various foods can be cooked this way.
- Suitable method for cooking food for large number of people like in institutions.

Disadvantages

- Nutrient loss may be high especially by leaching
- Soluble matter may be lost into the cooking liquid
- The food absorbs much water and may become soggy
- The food lacks flavour
-

Rules / Principle for boiling foods

- Use as little water as possible just enough to cover the food
- Cover the sauce pan so that the temperature will be maintained throughout the cooking
- Bring the water to boil first before putting in the food except when boiling eggs
- Use the water as a sauce as it contains flavours and water soluble nutrients from the food instead of pouring it away

Suitable foods

- Most vegetables, Muscular cuts of meat
- Lamb: middle neck, Beef: briskets (salted), silverside (salted)
- Pork: knuckle, ham, Eggs
- Pasta, rice, cereals

Steaming

It is the moist heat method of cooking food in the steam which rises from boiling water. The food may be cooked by direct or indirect contact with steam.

Direct steaming can be done in the steamer and with a can of boiling water. Indirect steaming can be done between two plates over a can of boiling water or locally using banana leaves.

Rules of steaming / points to consider in steaming

- Cover the food with a water proof lid or wrapping to prevent condensed water vapour from spoiling the finished result.
- Keep a kettle of boiling water nearly to replenish the steamer when the boiling water dries out due to evaporation.
- Allow water to come to the boil before placing food in the steamer, and ensure that a steady flow of steam is produced
- Stand well at the back when removing the lid of the steamer to prevent scalding
- The lid must be fixed tightly and the steamer must fit the pan to prevent steam from escaping

Advantages of steaming

- Loss of nutrients by leaching is reduced as food does not come into direct contact with the water.
- Food cooked in this way is easy to digest and has a high texture. This is therefore a suitable method to use for convalescent cookery.
- Little attention is required while the food is cooking, except to replenish the water supply and monitor the heat supply.
- Food is very unlikely to be overcooked
- Less fuel is used as low heat is needed

Disadvantages of steaming

- Food takes a longtime to cook; therefore the heat destruction of vitamin C is more likely to occur.
- Even with a well-fitting lid, the kitchen is likely to be filled with moisture and should therefore, be well ventilated
- There is little development of flavour

Suitable foods for steaming

Puddings	meat and fish	Sponge	luwombo
Rice	potatoes	Matooke	cassava

Braising

This is a combination of stewing, roasting and steaming. The food is cooked slowly by moist heat in a tightly covered saucepan. Braising is suitable for cuts of meat which are too tough to roast but are tenderer than stewing cuts.

The meat is first browned in hot fat to seal in the juices and is then placed on the base of diced vegetables called mirepoix. Stock is added to come half way up the meat and it is cooked until tender. The meat should be basted frequently with the stock. When cooked the sauce is strained, reduced or thickened and poured over the meat. The mirepoix should be served with the food or used as soup.

Food suitable for braising

- Meat; top side or lamb, pork, brisket of beef
- Poultry; chicken whole
- Offal's; heart, liver
- Vegetables; celery, onions, root vegetables

Advantages of braising

- A whole meal can be cooked in one pan which saves time and fuel.
- Tough cuts of meat can be used.

Disadvantage of braising

- Meat may not develop a good colour and may need to be grilled at the end of cooking time.

Simmering

Simmering is rather similar to boiling in that the food is cooked in the liquid but after the liquid has boiled, the heat is reduced so that the temperature is kept just below the boiling point. It is a good way of cooking less tender parts of meat and there is no waste of fuel as the meat will not toughen.

The liquid is rich in flavour and nutrients and so this liquid should be served with the meat. The simmering temperature / point is between $90^0 – 95^0$C.

Advantages of simmering

- Less fuel is used since little heat is required
- It makes the meat tender
- There is no loss of nutrients since the liquid in which the nutrients dissolve is served with the meat
- It requires little attention
- There is no loss of flavour

Disadvantage of simmering

- It is a slow method of cooking which requires a lot of time

Par – boiling

This is the part cooking of certain foods which are then cooked by another method until ready / cooked. For example, potatoes can be par-boiled before being baked in the oven. These foods are boiled in a liquid for 5-10 minutes until the outside is soft.

Stewing (conservative method)

This is a long slow cooking of food in a liquid using a covered pan i.e. stewing is a long slow moist method of cooking in which small pieces of food are simmered in a minimum amount of liquid like water, stock or prepared sauce which is always served with the food.

When the stew is cooked in a dish with a tightly fitted lid either on top of the stove or inside the oven, this can be a casserole dish.

Casserole cookery

This is a slow method of cooking food in a small quantity of liquid in a covered utensil in the oven. The food is cooked in a combination of stewing and steaming. The utensil used is also known as a casserole dish.

Advantages of casserole cookery

- It is economical in the use of fuel as several dishes can be cooked at the same time if the temperature is low.
- There is little loss of food value in cooking since the meat; fish are served in the liquid in which they are cooked
- One course of the meal can be cooked completely in one utensil
- Inexpensive foods can be used in this method since the cooking process is long and slow

Disadvantages of casserole cookery

- It is a long and slow method therefore requires a lot of time
- The casserole dish is expensive to buy

***Note;* -** The container may have a tightly fitting lid to reduce the loss of moisture by evaporation and prevent drying upon burning.

This cooking method is the most commonly applied to mixtures of meat. It is important that the amount of liquid used should not be more than that which is convenient. It is usually not more than 250 ml of liquid to each 500 gm. of meat.

Cooking must be slow in order to give time for the connective tissue in tough meat to change to soluble gelatin so releasing fibers.

Purpose (aim) of stewing

Stewing is intended to soften all tissues and to serve the liquid and its contents as a complete dish. Stewing is both economical and nutritional. Therefore cheaper cuts of meat and poultry which would be unsuitable for roasting and grilling can be made tender and palatable. The food maybe cut into small pieces thus exposing large surface area of the food to heat.

Stewing also produces acceptable flavour, texture and eating quality

Principles involved in stewing

- Stewing should be carried out on top of a stove or in a covered case in the oven
- The meat must be trimmed off to remove excess fat (skimming) so that the stew is not greasy (skim the stew)
- The container must have a tightfitting lid to prevent loss of moisture by evaporation to prevent drying upon burning
- It is important that the amount of water used should not be more than that which can be conveniently served with the stew. (use just enough water to maintain the flavour)
- The cooking must be slow in order to give time for the connective tissue to be changed to soluble gelatin so releasing the fibers and making it tender
- The ideal cooking temperature for stewing on top of the stove is approximately 82^0c i.e. simmering point
- In the oven it should be approximately 170^0c. Too rapid cooking will harden protein fibers. The connective tissues changes gelatin too quickly and the meat fibers will fall apart therefore the stew should be tough and stringy.

Note;

"A stew boiled is a stew spoilt". Gentle heat will ensure coagulation of the protein without hardening.

NB

- If a stew is boiled rather than simmered, it results in a tough unappetizing meat. Poor quality meat (cheap and tough) can be cooked by this method.
- Cheaper, course foods are often lacking flavour and by this method, flavourings may be added to supplement the natural ones e.g. onions, tomatoes, carrots etc. can be added to the stew.

- The food e.g. meat should be cut into small sizeable pieces so as to expose as much surface area as possible to the meat. This helps it to become tender and extract out as much flavour as possible.
- Stews should not be over thickened therefore correct rates of thickening agents are essential ie. The sauce should be light in consistency.
- Overcooking should be avoided as it causes evaporation of liquid, breaking up of the food, discolouration and spoilage of flavour.

Suitable cuts of meat

- Beef – thin flank, shin, neck, the chunk, and ox-tail
- Rump-scrag, breasts, mid neck
- Veal – breast, knuckle and neck

Advantages of stewing

- Economy, tough, cheap cuts of meat may be rendered tender and palatable e.g. the neck, tail
- There is little loss of flavour and nutritive value because the extractives are served in the gravies. During cooking the containers are kept tightly covered and therefore loss of flavour and nutritive value is minimal.
- Economy of labour as stews needs little attention
- Economy of fuel, very little fuel is used i.e.The cooking is done on a low heat and food can be cooked in bulk.
- A larger amount of vegetables used in the stew from vegetable supplements to the meat protein
- Economy of washing up the whole dish (meal) may be cooked and served in one vessel
- A wide variety of stews may be served depending on the ingredients i.e. it gives variety to the menu diet.
- The cooking liquid is served with the food, adding flavour and nutritional value
- The meat juices which escape from meat during cooking are retained in the liquid which is part of the stew.

Disadvantages of stewing

- It is a slow method of cooking, tough meat may need 3-4 hours but stews cooked in a pressure cooker will take 1/3 of the required time.
- Some vitamins will be destroyed during the long slow cooking

Types of stews

1) Simple stews (cold water stews)

These are stews in which the cooked meat and the vegetable are served together e.g. hot pot, Irish stews. This method is ideal for very tough meat e.g. Mutton in Irish stew.
The meat is tossed in seasoning in a casserole 9sauce pan) moisture with stock and very slowly brought to simmering point. The stew is simmered gently for 1-3 hours.

2) Brown stews / fried stews

This is a simple stew but the meat and vegetables are sautéed in fat and brown roux is made from the fat and the flour which will colour the stew.

NB; In this type of stew the prepared cubed meat is tossed in hot dripping until browned followed by onions and other vegetables.
Flour is added to thicken the stew and then stock is gradually stirred in and brought to simmering point. The stew is cooked for 11/2 -31/2 hours e.g. Ragouts are meat stews usually brown.

3) Rich white stews

For theses, better quality meat is used e.g. lamb, veal is soaked overnight and blanched to whiten it and remove the strong flavour, vegetables and seasonings and bouquet - garni (herbs) are added with sufficient cold stock to barely cover the meat.
The stew is simmered for 11/2 to 21/2 hours and thickened with a roux. E.g. yolks and cream may be added to enrich it e.g. fricassee, a white stew made from chicken, meat and fish, blonquett stew enriched with egg yolks and cream.

POACHING

Poaching is the cooking of food in the required amount of liquid at just below boiling point. The cooking liquid maybe water, milk, stock, wine, syrup or court bouillon.

The purpose of poaching

The purpose of poaching is to cook food so that it;

i) Easy to digest
ii) It has a suitable tender texture
iii) It is safe to eat
iv) Pleasant to eat

Heat transfer

Heat is conducted through the cooking utensil to the surface of the food in contact with it.

It is carried to all areas of cooking liquid by convectional currents. Heat reaching the surface of the food is transferred by conduction. If steam is trapped by a lid or greased paper it will increase the speed of heating.

Illustration of The poaching process

The figure above illustrates conduction and convection in poaching. Poaching does not require special equipment.

Deep poaching is often carried out in saucepans and shallow poaching in trays, saucepans or oven proof dishes.

Methods of poaching

a) Shallow poaching

Most foods are poached by this method and a minimum amount of liquid is added and is later used to make an accompanying sauce.

Grease paper or lid can be used to trap moisture and prevent drying out. The item can be basted during the cooking process.

Foods cooked by this method such as cuts of fish and chicken are cooked in the minimum of the liquid i.e. water, stock, milk or wine.

The liquid should never be allowed to boil put kept at a temperature as near to boiling as possible. To prevent the liquid from boiling, bring to the boil on top of the stove and complete the cooking in a moderate cooking oven approximately in 180^0C.

Shallow poaching using shallow pan

When poaching some item, more liquid is used than in shallow poaching. Eggs whole fish and chicken and fruits are cooked by deep poaching.

In the case of fruits, this is because they should be completely covered to prevent discolouration. For eggs the depth of water is needed to prevent sticking.

Effects of poaching

i) Poaching helps to tenderize the fibrous structure of the food and the row texture of the food becomes edible by chemical action.
ii) Poaching is only suitable for foods that require low temperature or those that gentle handling e.g. eggs and fish (at low temperature)

Temperature and time control

Temperature must be controlled so that the cooking temperature does not fall below or exceed the correct degree required.

Shallow poaching is just below simmering points (may be carried out in an oven). Deep poaching is just below gentle simmering.

Time is important so that the food is neither under cooked, therefore unpalatable or over cooked when it will break up and also less nutritive value.

NB

In poaching the various foods may be trussed, tied, wedged etc. prior to poaching to give a desired shape when cooked.

Advantages of cooking

- Good for cooking delicate foods because the shape will be maintained due to low temperature employed e.g. fish and eggs.
- Does not require special equipment
- Does not require much attention and no skill is required i.e. It is a simple method.
- Does not waste fuel since low temperature are required.

- Nutrients are retained since the cooking liquid is used for making the accompanying sauce.
- The food is moist and easy to digest since basting is done throughout the cooking process therefore it does not dry out.

Disadvantages of poaching

- It is restricted to certain foods e.g. eggs and fish which are delicate but tougher foods like meat cannot be cooked by this method.
- The nutrients and flavours may be lost in the cooking liquid (poaching liquid) especially in deep poaching therefore if not used for making accompanying sauces it will be wasted.
- The foods are not attractive therefore garnishes may be required.

Pressure cooking

Underlying principle

Under ordinally kitchen conditions, most cooking liquids boil at 100^0 C at normal atmospheric pressure and the temperature cannot be raised beyond this point.

However if the atmospheric pressure can be increased, the temperature can be raised and the food cooked more quickly. This is the principle in which pressure cooking is based.

The pressure cooker is designed to retain the steam which escapes from a normal saucepan thus causing pressure to build up and the temperature inside the cooker to rise above the normal boiling point. The steam is forced through the food hence cooking it very quickly. The increase in temperature is caused by confining the steam in the cooker and not allowing it to escape.

As altitude increases, the boiling point of the liquid decrease therefore extra cooking time is necessary for pressure cookery at altitude above sea level.

NB

By this method even tough meat is made tender and food can be cooked in a fraction of the normal cooking time.

The cooking time is short and therefore little liquid should be added to the food. And their liquid cab be used for sauces to serve with meat or fish added to soups.

Types of pressure cooker

There are mainly two types available;

Saucepan type – this one is more versatile since it is fitted with variable pressure controls and available is various sizes.

Casserole type – this is suitable for ordinally everyday cooking. It has a 1.5 pressure control valve. All models can be used for any source of heat.

Description of a pressure cooker

The pressure cooker is a large saucepan made of heavy gauge aluminum. It has a special tightly locking lid with a rubber gasket or ring, which makes an air tight seal.

The cover has a central vent which must be kept clean at all times to allow excess steam to escape. There is a safety valve on the lid, consisting of a rubber plug with a metal center.

If the pressure inside the cooker builds up to 20 kb or over because the central vent is blocked, the metal center of the safety plug keeps out releasing the steam. If the cooker boils dry and over heats the metal center will melt also releasing the steam.

Kinds of pressure control

There are two types;

Every pressure cooker is fitted with a pressure control. Pressure levels are now usually known as;

i) High (15 Ibs)
ii) Medium (10 Ibs)
iii) Lower (5 Ibs)

a) Level type (an indicator weight)

Non variable control valve fitted with a spring loaded to take 15 Ibs (high pressure only)

b) Variable control (jiggle weight)

Enables three different pressures to be used in cooking. It consists of an inner 5 Ibs (lower weight), a ring which shrews onto give 10 Ibs (medium pressure and an outer ring which can be added to complete the maximum 15 Ibs (high pressure) depending on how much pressure is needed.

NB

The temperatures inside the cooker at;
15 Ibs / sq. in pressure cooker, temperature is 121^0C
10 Ibs / sq. in pressure cooker, temperature is 116^0C
5 Ibs / sq. in pressure cooker, temperature is 108^0C

Diagram of pressure cooker

Leave space for the dagram

Safety devices

Every pressure cooker must be fitted with a safety device which comes in action automatically if the pressure control is blocked e.g. by over loading the cooker. One of the most common type is;

i) Dual safety rubber plug;

This has a movable center pin which will pep up to release excess pressure and can be reset for further use. Should the temperature inside the cooker become excessive as it starts to boil dry the pin will melt.

Most pressure cookers also require a gasket sealing ring to ensure there is no leakage of steam at the joint between the cover and base of the cooker.

A locking plug device ensures that the cover cannot be removed from the base during cooking while there is still pressure inside. These safety devices are designed to protect the cooker from damage if misused but should not be needed if manufacturer's instructions are followed.

Water whole cooking liquid used in the cooker depends on the length of cooking time and on the quantity of food being cooked. The liquid should always be added to the cooker first to avoid amition .

Any liquid can be used provide it can give off steam when boiled e.g. water, thin gravy, soup, wine, fruit juice or milk. Melted fat is not suitable as it doesn't give off steam which is required to build up pressure.

As a general rule, a minimum of 250 mills of liquid is needed for the first 15 minutes or part of the 15 minutes cooking time plus a further 125 mills for every subsequent 15 minutes for part of 15 minutes. But the manufacturer's recipe will give the right quantity for each food and must be followed.

Rules for using a pressure cooker

- Follow the manufacturer's instructions supplied with the cooker; remember that if not used, pressure cooking can be very dangerous.
- Add the correct amount of water as per instructions and remember that the cooker should never be filled more than half full of the liquid foods or 2/3 of solids.
- Take care to place the lid and weights in positions correctly
- When cooking time is reached, reduce the pressure by leaving the pressure cooker to stand at room temperature or by running cold water over the side of the cooker. "Never open the pressure cooker when there is pressure within".
- After cooking and use wash the cooker very thoroughly especially the rim, gasket and stem valve. If any particles of food remain in these areas, the cooker may not function properly. Dry well and store properly without the lid on.
- Use a reliable cooker with a safety device thus operates when over cooked and also when too much pressure.
- Replace gasket and safety device when necessary.
- Expel the air completely before pressure builds up by boiling for a few minutes. Failure to do this leads to longer cooking, loss of vitamin C and change colour in vegetables.
- Control the heat once pressure has been reached ie. Pressure is reached when there is continuous slight hissing sound. Electric plates may be taken off if less than 10 minutes cooking time is necessary.

Advantages of pressure cooking

- The average cooking time is reduced to quarter i.e saves time
- It economizes fuel
- Food value and flavour are retained
- Difficult foods can be cooked in it at the same time i.e. a whole meal can be cooked in one saucepan which saves on washing up.
- Requires little attention.

Disadvantages of pressure cooking

- The food cannot be tasted to see if it is ready without reducing pressure fully and opening the cooker.
- Unless cooking is timed previously, food will be over cooked.
- It needs a skilled person to use it.
- Food cannot be stirred; there is a possibility of foods sticking to the base of the cooker. To avoid this grease the base before use and avoid thickening stews etc. until end of cooking time.
-

Timing the pressure cooker

Bring the cooker to pressure;

The cooker is first put on a high heat with the vent pipe open. The liquid will boil and turn into steam which pushes the air out of the cooker through the open vent pipe .it is necessary to wait for a steady flow of steam from the vent pipe before putting on the pressure weight or closing the control level.

When this done ,the cooker must be kept on the recommended heat until it has reached pressure which is indicated by a loud hissing a further escape of steam and a few drops of water around the pressure control.

At this point, timing can begin and the heat should be adjusted so there is a continuous hissing and escape of steam throughout the cooking time.

Incomplete exhaustion of air causes oxidation of light coloured vegetables, darkening of vitamin c due to oxidation.

Lidding

The pan should not be more than a quarter full or half full of soup or stews. Allow adequate clearance between food and lid, if pan is over filled, the food may bubble up and close the vent pipe.

Bring the safety device into active if using basins or moulds make this tight easily allowing a 2cm between basin and lid.

Recipes

Supplied by the manufacturer of the cooker and must be followed .Various foods may be cooked together as flavours. Food doesn't come in contact and no air should remain in the cooker.

Reducing pressure

There are two methods depending on type of food being cooked.

- Reducing pressure immediately with cold water; Cold water is allowed to run over the lid and sides of cooker for approximate 30 seconds or the cooker may be stood in the bowl of cold water until pressure is reduced to normal. This doesn't make the food cold or unpalatable.
- Reducing pressure at room temperature, turn off the heat and allow the cooker to cool slowly to reduce the temperature and pressure gradually [not more than 5-10 minutes]. This method can be used for milk pudding .egg custard, pone pudding, stews, vegetable.