



National Agricultural Youth Show

Culinary Arts Manual



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1. PERSONAL HYGIENE

- ❖ Wear a clean uniform that will easily show stains.
- ❖ Always wear a hairnet or a chef's hat.
- ❖ Use waterproof plasters to bandage cut wounds.
- ❖ Hand, fingernails and cloths must be always clean.
- ❖ Wash hands and fingernails with warm soap water.
- ❖ DO NOT:
 - Wear jewellery that might come in to contact with the food.
 - Touch your face or lips when preparing food.
 - Smoke when you cook.
 - Spit when you cook.
 - Bring food into contact with any other body part but your hands.
 - Lick your fingers when cooking or preparing food.
 - Sneeze or cough over food, food containers or work bench.
 - Bring any equipment into contact with your mouth.
 - Blow into any plastic bags, packaging materials or sausage casing.

2. MOST COMMON CAUSES OF FOOD POISONING

A study conducted about causes of food poisoning shows (in descending order):

1. Food prepared too long in advance.
2. Food left at room temperature for a long period.
3. Insufficient cooling.
4. Insufficient heating.
5. Insufficient preparation.
6. Food left on a warm shelf for a long period.
7. Cross contamination.
8. Insufficient defrosting.

Each food group has its own storage suggestion indicating temperature, shelf-life and place to store.

3. MEASURING INGREDIENTS

- ❖ Liquids – use a measuring jug or cups.
- ❖ Large quantities of dry ingredients – use a scale or measuring cups.
- ❖ Small quantities – use measuring spoons.
- ❖ Dry ingredients must be measured loosely, not pressed down.
- ❖ To measure a spoon full – heap up the spoon and scrap the excess off with a knife.
 - $\frac{1}{2}$ spoon – divide spoon in half with a knife
 - $\frac{1}{4}$ spoon – divide again across
- ❖ Always sift flour before you measure.
- ❖ Stir baking powder before you measure.
- ❖ Break up lumps in sugars and salts before you measure.

4. CONVERSIONS

Metric (old British methods)

Teaspoon

A pinch = less than 0.5ml ($\frac{1}{8}$ teaspoon)

0.5ml = $\frac{1}{8}$ t

2ml = $\frac{1}{4}$ t

3ml = $\frac{1}{2}$ t

5ml = 1 t

7.5ml = 1 $\frac{1}{2}$ t or 1 dessert spoon

10ml = 2 t

20ml = 4 t

Table spoon

7.5ml = $\frac{1}{2}$ T

15ml = 1 T

30ml = 2 T

45ml = 3 T

Cups

60ml = $\frac{1}{4}$ cup

80ml = $\frac{1}{3}$ cup

125ml = $\frac{1}{2}$ cup

160ml = $\frac{2}{3}$ cup

200ml = $\frac{3}{4}$ cup

250ml = 1 cup

375ml = 1 $\frac{1}{2}$ cup

500ml = 2 cups

1l = 4 cups



5. EGGS

EGG WHITES

- The egg white or albumen of the egg roughly represents 60% of the whole egg.
- Almost $\frac{3}{4}$ of the egg consists of water.
- The proteins, ovo-albumen in egg whites is the reason why egg whites can be whisked into a stiff foam.
- Thin whisks can form small bubbles. Electric beaters can beat egg whites into a stiff foam (but can easily over beat the egg whites).
- Over beating eggs will result in lumps and it will lose its elasticity.
- Liquid will drain from egg whites when it stands for too long.
- Over beating or under beating eggs will result in an inconsistent/ unstable foam.

QUALITY OF THE EGG WILL DEPEND ON

- The state of the egg
- Size
- Mass
- If the shell is cracked
- If the egg is clean

HOW TO TEST THE FRESHNESS OF AN EGG

- Place in a bowl of water, if it floats it's old.
- Fresh eggs will sink and lie horizontally.
- The egg white must not be watery. It must be gel-like.
- Fresh eggs have rough shells.
- Old eggs have shiny shells.



6. COOKING METHODS

REASONS WHY FOOD MUST BE COOKED

1. The texture softens and will make it easier to eat.
2. Food will look more appealing to eat (colour and smell).
3. Food will be easily digestible.
4. Destroys harmful bacteria, to make food safe to eat.

Choose the right cooking method for the type of food you want to make.

Pasta and rice need water/liquid to swell and must be boiled.

Tough meat can be softened by being stewed while tender meat can be barbequed or grilled.

6.1 MOIST-HEAT COOKING METHODS

These methods use liquids (any liquids but oil) such as water, wine, stock or milk too cook the food. Steaming food is also a method of moist-heat cooking.

BOILING

Boiling is a broad term used for cooking food in just enough liquid to cover the food.

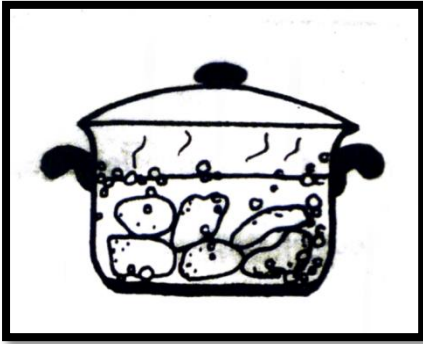
Two techniques used for boiling food:

- Rapid boiling – liquid **boils fast and rapidly**
- **Simmering** – liquid boils slowly with only a few bubbles

Each technique will give you a different result.

ADVANTAGES	DISADVANTAGES
Easy cooking method	Food boiled rapidly can easily break down
Requires little attention	Vitamins and minerals dissolves in the liquid
Food will be soft and easily digestible	Taste and colour can get lost if boiled too long or too rapidly
It's a quick moist-heat method	
Liquids can be used for soups and sauces	

Rules for boiling



- a) Food must just be covered with the liquid.
- b) When using a lid ensure that it has a tight fit to keep the heat inside.
- c) Use the correct size pot.
- d) Water must remain at boiling point:
 - Rapid boiling – for foods like pasta
 - Simmer – for foods that can break down quick
- e) If needed add more boiling water.
- f) Boil until food is 'just' cooked "*al dente*".

Examples of food to be boiled

- Vegetables: All vegetables. It is modern to cook veggies al dente and not soft and mushy
- Meat: Tough meats like oxtail, tongue and breast pieces
- Poultry: Sometime a whole unboned and stuffed chicken can be simmered e.g., chicken galantine
- Eggs: Eggs can be boiled either soft, medium or hard.
- Starch: Rice must be simmered slowly. Pasta must be cooked in rapidly boiling water (a drop of oil may be added to the water)
- Meat extract and soup: Simmering bones and veggies

POACHING (French Term: Poche)

This is the method used to cook food in liquid that's just below boiling point.



Rules for poaching

1. The liquid may never boil or simmer. Keep below boiling point.
2. Poaching can be done either on stove top or in the oven.
3. Poaching can be done with a lid (e.g., fish) or without a lid (e.g., eggs)

The liquid used for poaching will depend on the type of food you want to cook. Different liquids often used: Stock, water with lemon juice, milk or wine. These liquids can later be used as the base for sauces.

ADVANTAGES	DISADVANTAGES
An excellent method to cook foods that can easily be broken down and get mushy (e.g., fish and soft fruits)	It is a long and slow method
Easily digestible and ideal for hospitals and sick people	Vitamins and minerals dissolve and gets lost in the liquid
	Food can lose its colour and look unappealing
	Needs a lot of attention (liquid may never boil)

Examples of food that can be poached

- Fish: Haddock fillet poached in milk, sole poached in white wine. Shellfish, lobster, prawns and crab are often poached in court-bouillon (fish broth).
- Fruit: Soft fruits can be poached in water or in syrup. E.g., pears, rhubarb, apricots, peaches, gooseberries and prunes.
- Eggs: Only use very fresh eggs as they will hold their form the best. Break the eggs into a bowl and slowly add to the water.

STEWING

This is a slow cooking method using smaller pieces of food cooked in a small amount of liquid. Both the food and the liquid must be served.

Rules for stewing



1. Cut meat into smaller pieces and braise before stewing.
2. After braising the meat, add it to a pot with a small amount of liquid, vegetables and seasonings. Stew until soft.
3. Always use a well fitted lid when stewing.
4. Add more boiling water if needed.
5. The liquid is part of the dish. The liquid may be thickened or served as is.

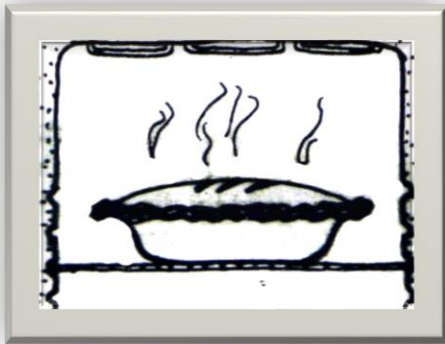
ADVANTAGES	DISADVANTAGES
The food keeps its flavour and nutrition in the sauce.	Very slow process. Uses a lot of electricity.
Doesn't require a lot of attention	Food may easily burn if you are not using a heavy bottom pot.
Tough and cheaper pieces of meat can be used	

6.2 DRY HEAT COOKING METHODS

This method cooks food through heat circulation or by adding food to heated oil/fat. No water is used with this method.

BAKING

Baking is the method of cooking food through dry warm air in a closed oven. No extra oil or water gets added to the dish while baking.



Rules for baking

1. Pre-heat the oven to the correct heat.
2. Place the oven rack in the middle of the oven.
3. Never overload the oven.
4. Two thirds of the baking time must be over before opening the oven door.
5. Always use open pans. Grease or spray the pans beforehand to prevent the food to stick to the pan.

AVANTAGES	DISADVANTAGES
Delicious aromas and an appealing look	To use the oven for one dish is a waste of electricity and can be expensive
Large amounts of food can be baked at the same time	Food can burn easily if not watched closely

Examples of food to bake

The term 'baking' refers to, breads, cakes, biscuits, pastries and desserts.

Fruit: Baked apples are quite popular. They can be pitted and stuffed/filled.

Vegetables: A variety of veggies can be baked. E.g., Potatoes, Tomatoes, stuffed pumpkins etc.

OVEN ROASTING

Cooking food using warm dry air in a closed oven with layers of fat or extra oil.



Rules for roasting

1. Pre-heat oven to the correct temperature.
2. Oven racks must be placed at the right height.
3. Roasting must be done in an open pan/tray that is placed on top of the oven rack.

Techniques

Basting: Constantly covering the meat with fat or sauce while roasting. This process keeps the meat moist and flavourful.

Bartering: Covering lean meat, wild birds or poultry with strips of bacon or fat to keep the meat moist.

Lardering: Use a lardering utensil to inject lard into meats in order to moisten the meat and enhance the flavour. Typically, a strip of bacon or pork lard.

Examples of foods to roast

Whole meat pieces: Leg of lamb, beef fillet, pork fillet, etc.

Poultry: Whole chicken or chicken pieces.

Venison: Ostrich fillet, kudu fillet, etc.

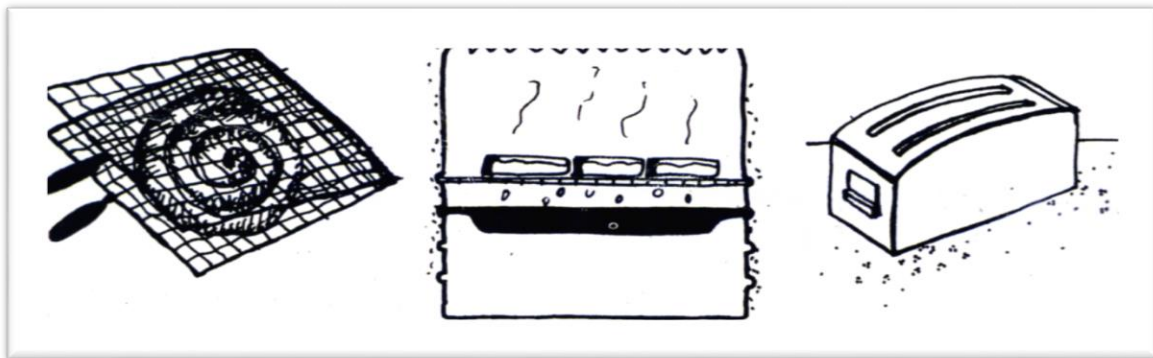
Vegetables: Potatoes, Carrots, pumpkin, and onions are popular as they get a nice golden colour.

GRILLING

The process of cooking food with direct heat.

Different methods of grilling

1. Heat from the bottom – coals, grilling element.
2. Heat from above – hot element of the oven.
3. Between heat – bread roaster and grilled sandwiches.



RULES FOR GRILLING

1. Pre-heat the grilling element until red hot to avoid food drying out.
2. Baste meat with oil or butter to avoid the meat from drying out.
3. Do not prick the meat with a knife or fork. Use tongs or a spatula to turn the meat – this will avoid meat juices to get lost.
4. Grilling may be started on the hottest part of the grill and continued on the cooler parts.
5. Use an oven pan to catch up excess fats.

6. Leave oven door slightly open.
7. Serve immediately.

ADVATAGES	DISADVANTAGES
Quick method	Food must be served hot and immediately.
Looks appealing	Requires full time attention as it can burn and dry out.
Very flavourful	Use good quality tender meat – can be expensive.

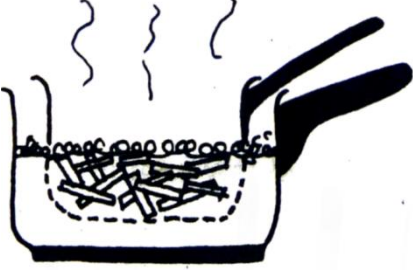


Examples of food to grill

- Oily fish: Salmon, Snoek, Kabeljou, Sardines, Galjoen
- Meat: Portions good quality meat like fillet, steak, chops, rashers, and sausage.
- Chicken: Spatchcock chicken or chicken portions.
- Vegetables: Tomatoes and Mushrooms.
- Salty snacks: Open breads.
- Grilled items: Bread, Scones and Muffins.

FRYING

Cooking of small, thin and tender portions of meat and also the cooking of other food in warm oil or fat on the stove top

Three frying methods

	<p>Deep Frying: use a deep-frying rack in a deep-frying pan (filled half way with oil). Pre-heat oil before frying. Food gets covered with oil completely. The cooking process is fast.</p>
	<p>Shallow frying: Use a shallow heavy bottom pan. Pre-heat a small amount of oil or fat (3mm-5mm) to cover just the bottom of the pan.</p>
	<p>Dry frying: The fat stored in the food is used to fry the food. No extra fat or oil is needed. E.g., sausages, bacon, and chops with a lot of visible fat.</p>

RULES FOR FRYING

1. Use clean good quality oil for a safe and good result.
2. Pre-heat the oil before adding the food. Use a frying rack when deep frying food.
3. Test the temperature of the oil with a piece of bread.

ALUMINIUM FOIL OR BAKING BAGS

Food gets sealed in a special baking bag or aluminium foil, to keep in all the natural flavours and nutrients.

Rules when using baking bags

1. Prepared food gets placed into the bag.
2. Ty the bag loosely.
3. Prick a few small holes at the top of the bag for steam to escape.
4. Place the bag on an oven tray and bake.

Rules when using foil

1. Place the prepared food on the shiny side of the foil. Cover and seal the food with the foil to avoid steam from escaping.
2. Place on a baking tray and bake in the oven.
3. Open the foil 30min before taking it out of the oven. By doing this the food will get a nice golden colour.

ADVANTAGES	DISADVANTAGES
Food is partly steamed, and proteins will shrink less.	Baking bags must only be used once.
Fish and veggies will keep their shape.	
Looks appealing.	
Nutrients stays in tack.	

Examples of foods to use with foil or baking bags

Meat, Fish, Vegetables and Poultry

MICROWAVE OVEN COOKING

Microwave cooking is very popular these days. Food gets cooked through radiating micro-waves. Micro-waves are energy waves and not heat waves. These energy waves are radiated by the magnetrons of the microwave oven. Micro-waves will only penetrate 5cm of the food. When the microwaves penetrate the food, it forces the molecules of the food to vibrate. The vibration generates heat and that is how the food gets cooked.

Uses of a microwave oven

- Quick cooking of food.
- Defrosting food.
- Re-heating food.

RULES FOR USING A MICROWAVE TO COOK

1. Any foods with an outer membrane, peel or skin must be pricked before cooking in the microwave to avoid food from popping or exploding. (E.g., eggs, sausages, potatoes, etc.)
2. Leave food to rest for a few minutes after cooking.
3. NEVER place any kind of metal in the microwave oven. Not even bowls or plates with metal decorations.
4. Never switch on an empty microwave it can damage the magnetron.

ADVANTAGES	DISADVANTAGES
Quick and easy method	Only small amounts of food can be cooked, defrosted or re-heated
Suitable for defrosting and re-heating small amounts of food	Food will not get a nice golden colour
Food will not lose its flavour, nutrients or form	Pay attention to the time you cook the food in order to avoid under cooking or over cooking the food
	Not suitable to make food crisp and crumbly. Tarts and Pizzas cannot be cooked in a microwave oven
	Microwave ovens are expensive

7. SAUCES – FOR YOUR OWN INFORMATION ONLY

CLASSIFICATION OF SAUCES	
<p>1) BROWN SAUCES</p> <p><u>BASIC</u> Espagnole/ Demi-glaze orange Basic brown sous – wine sauce Meat sauces/ Jus Roti</p>	<p><u>VARIATIONS</u> Bigarade Bordelaise Chaufroid Colbert Sauce Tarragon Sauce</p>
<p>2) BUTTER BASED SAUCES</p> <p><u>BASIC</u> Hollandaise Sauce</p> <p>Béarnaise Sauce</p> <p>Beurre Blanc (white butter sauce)</p>	<p><u>VARIATIONS</u> Maltaise Sauce Mustard Sauce Noisette Sauce</p> <p>Charon Sauce Foyot Sauce</p> <p>Herb butter Sauce</p>
<p>3) WHITE SAUCES</p> <p><u>BASIC</u> Béchamel</p> <p>Velouté (Venison stock)</p> <p>Velouté (Chicken Stock)</p> <p>Velouté (Fish Stock)</p>	<p><u>VARIATIONS</u> Aurora Sauce Chantilly Sauce Horseradish Sauce Mornay Sauce Creme Sauce</p> <p>Capers Sauce Mushroom Sauce Curry Sauce Chaufroid Sauce Tarragon Sauce</p> <p>Mushroom Sauce Tarragon Sauce Supreme Sauce</p> <p>Anchovies Sauce Capers Sauce</p>
<p>4) OIL BASED SAUCES</p> <p><u>BASIC</u> Mayonnaise</p> <p>Vinaigrette</p>	<p><u>VARIATIONS</u> Tomato Mayonnaise Tartare Sauce Green Sauce</p> <p>Herb Sauce Fruit Vinaigrette Sour Sauce</p>

<p>5) SPECIAL SAUCES</p> <p><u>COLD SAUCE</u> Berry Sauce Cumberland Sauce Horseradish Sauce Peppermint Sauce</p> <p><u>WARM SAUCES</u> Curry Sauce Mustard Sauce Appel Sauce Bread Sauce</p>	
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BROWN SAUCES

<p>Basic brown sauce (Fond Brun Lie)</p>	<ul style="list-style-type: none"> - Reduce stock to half its volume. - Thicken the stock with corn starch or arrowroot. - Boil to desired thickness.
<p>1. Espagnole The original basic brown sauce.</p>	<ul style="list-style-type: none"> - The base of the sauce is made from meats and roughly chopped veggies. - Meat stock is added and reduced by half. - Use corn starch/ arrowroot as thickener. - Strain
<p>2. Demi-glacé The refined version of the Espagnole sauce.</p>	<ul style="list-style-type: none"> - Espagnole/ basic brown sauce gets thickened and reduced by half. - Must have a glossy appearance.
<p>3. Meat sauce/ Jus Roti</p>	<ul style="list-style-type: none"> - After roasting meat, use the left-over meat juices in the pan to make a sauce. - Mix the meat juice with a meaty stock. - Boil until slightly reduced. - Thicken with corn starch. - Season to taste.
<p>Variations of the basic brown sauce. Add the following ingredients:</p>	<ul style="list-style-type: none"> - BORDELAISE SAUCE – red wine, shallots, and seasoning. - CHASSEUR SAUCE – mushrooms and tomato puree. - LYONNAISE SAUCE – sautéed onions and vinegar. - CREAM SAUCE – cream or béchamel - BIGARADE SAUCE – orange juice, orange zest and wine. - COLBERT SAUCE – chopped shallots, crushed pepper corns, white wine, and lemon juice. - CHAUD FROIDE – truffle flavouring, Meat aspic and Madeira wine. - ROBERT SAUCE – vinegar, onions, and mustard. - MADEIRA SAUCE – madeira wine and butter.

WHITE SAUCES

1) Béchamel Sauce

SAUCE	USE	PROBLEMS	VARIATIONS	TIPS
<p>Made from a Roux – melted butter and the same amount of flour.</p> <p>Heat</p> <p>Add milk flavoured with a clouté onion (an onion with a clove inside)</p> <p>Heat until sauce begins to thicken</p>	<p>To bind souffles.</p> <p>To make croquettes.</p> <p>To make Dutch mini pancakes.</p> <p>To thicken sauces and soups.</p> <p>To cover food.</p> <p>As basis for other sauces.</p>	<p>Lumps can form easily.</p> <p>Stir well.</p> <p>Strain.</p>	<p>a. Mornay Sauce (Cheese sauce).</p> <p>b. Chantilly Sauce (cream sauce).</p> <p>c. Onion Sauce.</p> <p>d. Tomato Sauce (Aurora sauce).</p> <p>e. Curry Sauce.</p> <p>f. Oyster Sauce.</p> <p>g. Horseradish Sauce.</p> <p>h. Mushroom Sauce.</p>	<p>Can be prepared in advance and re-heated.</p> <p>If you want the sauce to be smoother add more butter, cream, or eggs.</p>

2) Velouté

SAUCE	USE	PROBLEMS	VARIATIONS	TIPS
<p>Make a Roux.</p> <p>Add stock instead of milk (chicken, fish or veal stock)</p> <p>Simmer until the sauce has thickened.</p>	<p>With spinach puree.</p> <p>With eggs, fish, poultry, veal, or veggies.</p>	<p>If the sauce is simmered/boiled too much the sauce will become flaky.</p>	<p>a. Horseradish sauce.</p> <p>b. Mushroom Sauce.</p> <p>c. Tarragon Sauce.</p> <p>d. Chaud Froid</p> <p>e. Curry Sauce.</p> <p>f. Caper Sauce.</p> <p>g. Spring onion Sauce.</p>	<p>Add more liquids to a Velouté than to a Béchamel sauce.</p> <p>The sauce must have a smooth/velvety appearance.</p>

BUTTER BASED SAUCES

1) Hollandaise Sauce

SAUCE	VARIATIONS
<ul style="list-style-type: none"> - Mix vinegar, salt, and pepper. - Reduce to half in volume. - Let cool. - Add egg yolks to vinegar and whisk over boiling water until it starts to thicken. - Use a double boiler. - Keep whisking until sauce thickens. - Whisk in melted butter. 	<p>Maltaise sauce – orange flavour.</p> <p>Mustard Hollandaise – serve with egg or fish dishes.</p> <p>Mousseline – add cream, serve with fish, chicken, and vegetables.</p> <p>Noisette Sauce – add brown butter and serve with eggs, souffles, and vegetables.</p>

2) Béarnaise Sauce

SAUCE	VARIATIONS	TIPS
<ul style="list-style-type: none"> - Boil vinegar, onions/shallots, pepper corns, tarragon, and white wine. - Melt butter and let cool slightly. - Whisk egg yolks into the vinegar mixture. - Whisk over boiling water until the sauce becomes light in colour – sabayon. - Add melted butter and whisk. - Serve hot. 	<p>Choron Sauce – with tomato</p> <p>Foyot Sauce – With meat stock</p>	<p>Make sure the emulsion is complete.</p> <p>Can't be re-heated.</p>

3) Beurre Blanc – white butter sauce.

SAUCE	VARIATIONS
<ul style="list-style-type: none"> - Reduce wine, vinegar, and shallots. - Add cream and let boil. - Add butter. - Boil and do not stop whisking the sauce. - Serve hot. 	<p>Herb Butter Sauce – serve with meat, eggs, and vegetables.</p> <p>Red Butter Sauce – use red wine. Serve with Fish.</p> <p>White Wine Butter Sauce – serve with fish, poultry, or white meats.</p>

OIL BASED SAUCES

1) Mayonnaise

SAUCE	USE	PROBLEMS	VARIATIONS	TIPS
<ul style="list-style-type: none"> - Whisk egg yolks. - Add salt, mustard, and cayenne pepper. - Add half of the vinegar. - While whisking constantly add oil drop for drop to emulsify. 	<p>With salads</p> <p>Serve with cold dishes, chicken, fish or hard-boiled eggs.</p>	<p>If the sauce is not thickening – add a few drops of boiling water.</p> <p>It can split – whisk the split mayo to an egg yolk, drop for drop.</p> <p>Pour cold water into a clean mixing bowl and add the split sauce.</p>	<p>Mustard Sauce – serve with cold meats/ ham.</p> <p>Green Sauce – add pureed spinach, parsley, or tarragon.</p> <p>Tartare Sauce – add finely chopped capers, parsley, and onions – serve with deep fried fish,</p>	<p>Cold emulsified sauce.</p> <p>Ingredients must be at room temperature.</p> <p>Never Freeze.</p>

2) Vinaigrette

SAUCE	USE	PROBLEMS	VARIATIONS	TIPS
<ul style="list-style-type: none"> - Mix 1/3 vinegar with 2/3 oil, add herbs and seasoning in a sealable container. - Mix well just before serving. 	<p>Use as a salad sauce for green salads or potato salad.</p> <p>Can also be served with beef, chicken, and pork.</p>	<p>Very oily – add more vinegar or seasoning.</p>	<p>Herb Vinaigrette – serve with green salads, pasta, or potato salad.</p> <p>Ravigote – serve with warm beef, chicken, or pork.</p> <p>Fruit Vinaigrette – serve with chicken or green salad.</p>	<p>There is a wide variety of oils and vinegars available.</p> <p>OILS: Walnut oil, Corn oil, Olive oil, Hazelnut oil, Canola oil, Sunflower oil.</p> <p>VINEGARS: White wine vinegar, White spirit vinegar, Appel Cider vinegar, red wine vinegar, Balsamic vinegar (Italian)</p>

8. CANNING/ PRESERVATION OF VEGETABLES AND FRUITS.

The difference between: Jellies, Jams, Marmalades, Chutneys, Canned fruit, Canned veggies, and Fruit butter.

1. *Jellies* – are made of fruit juices and sugar boiled together. There are also recipes which you simply must to cool without boiling. Jellies are bright and must be soft yet firm to maintain their shape.
2. *Jam* – fruit and sugar boiled together. Jam is sweet and thick but not as firm as jellies but should be spreadable.
3. *Chutney* – like jam but not as sweet. It usually contains a combination of fruits, nuts, and raisins.
4. *Marmalade* – usually made from citrus fruits. Contains pieces of fruit peel in a transparent jelly.
5. *Fruit butter* – the pulp of the fruit is cooked with sugar until it is a thick, spreadable texture is obtained. Seasoning may be added to taste.
6. *Canning Vegetables* – to preserve veggies during seasons of abundance. Often flavour improves after standing for a couple of days. A lot of times these veggies are preserved as salads e.g., Copper penny salad, Curry bean salad and even noodle salad, while others are preserved as pickles e.g., gherkins and pickled onions.
7. *Canning fruits* – to preserve whole fruits or chunks of fruits in a syrup. The fruits must be transparent or bright. It should have the colour of the fruit it's made of.

Jelly

Choice of fruits to be used for making jelly.

Fruit rich in acid and pectin;

Sour apples
Quinces
Guavas
Marulas
Gooseberries
Prunes
Lemons
Grapefruit
Oranges

Fruit rich in pectin but contains less acid;

Sweet apples
Ripe quinces
Green figs
Green pears

Fruit rich in acid, but contains less pectin;

Strawberries
Ripe apricots
Pomegranates
Pineapples

Preparation of jelly:

1. Extract the juice from the fruit.
2. Do a pectin test and add sugar.
3. Cook the jelly.
4. Fill and seal the jelly.

Mistakes that may occur with jellies and marmalades:

1. *Cloudy* – juices not filtered through slowly.
2. *Crystals forming* – too much sugar or too little acid.
3. *Tough or Stiff* – too little sugar added, or the juice and the sugar was cooked too long.
4. *Soft or Syrupy* – not cooked long enough or not enough pectin in the juice.
5. *Watery layer on top* – too much acid in the juice.

Marmalade

- Soft Jelly with fruit pieces inside.
- Usually made from citrus fruit.
- Method of preparation is the same as with jelly.
- Must not be bottled immediately. Let stand a few minutes (3-4 minutes) so the fruit can be distributed equally.

Preparation of marmalade:

1. Wash the fruit.
2. Cut the fruit into slices. Remove the pips and the core. Soak in separate water for an hour to release pectin. Drain and leave a side.
3. Measure the fruit slices. Add 500-750ml of water to every 250ml fruit.
4. Leave to soak for a few hours or overnight.
5. Cook the mixture until soft and add the fluid from the pips and core.
6. Do a pectin test and add sugar.
7. Cook the marmalade.
8. Leave to stand a while.
9. Fill and seal the bottles.

JAM

- Both ripe and green fruit can be used.
- As a rule; fruits that are not sour, use 750g of sugar per 1kg of fruit. Sour fruits, use 1kg sugar per 1kg fruit.
- Fruit must first be boiled soft and then boiled in the syrup.
- Fruit and sugars are packed in layers in the pot and slowly heated until the sugar is dissolved. Once the sugar is dissolved boil the mixture.
- Jam must be boiled rapidly on high heat to maintain a light colour.
- If fruit is not sour add acidity to prevent crystallisation. The syrup must cover the fruits completely when bottled.

Jam Preparation:

1. Prepare fruit.
2. Boil fruit in water until soft.
3. Make a syrup.
4. Cook fruit in the syrup.
5. Bottle and seal.

Testing if the jam is ready:

1. Scoop a small amount of jam into a plate. Leave to cool completely. The jam should not be runny when cooled.
OR
2. Scoop a small amount of jam in a spoon and let cool. Allow the jam to slowly drip from the spoon. If the jam drips off the spoon in flakes and not in a single drop the jam is ready.
OR
3. Use a candy thermometer. Read the temperature of the boiling water and cook the jam until the jam mixture's temperature is 5°C higher than the boiling point of water.








PICKLES AND CHUTNEYS





- Pickles consist of whole fruits/vegetables or pieces of fruit/vegetables that's preserved in spiced vinegar.
- Chutney is made from fresh or dried fruit/vegetables that are cooked in vinegar and spices until it's the same consistency as soft jam.
- Use young fresh fruit/veggies for pickles.
- Use ripe fruit/veggies for chutneys.
- Use white vinegar for a bright coloured pickle. Brown vinegar results in a darker pickle but a better flavour. Either white or brown sugar can be used.
- No metal must come into contact with the chutney or pickles during the preparation of the bottling process.
- Consume pickles after 2-3 months of maturing.

9. KNIFE SKILLS

Knife skills are very important as it will shorten the food preparation time. All veggies must be cut evenly and be cut into the same size. Use a claw grip.

PREPARATION METHODS

PREPARATION METHODS	DISCRIPTIONS
<p>Chiffonade</p> 	<ul style="list-style-type: none"> • Finely chopped leafy greens such as cabbage, lettuce, and herbs. • Roll up the leafy greens and chop very fine.
<p>Julienne</p> 	<ul style="list-style-type: none"> • Veggies cut into long thin strips like matchsticks. Also known as French cut. • Peel a carrot and cut it length wise. Place the flat side on the cutting board. • Cut the carrot into thin 3-4cm long slices. • Cut each slice into thin strips.
<p>Brunoise</p> 	<ul style="list-style-type: none"> • Very small cubes. • Cut/dice the julienned strips into small cubes.
<p>Baton net</p> 	<ul style="list-style-type: none"> • Cut the veggies rectangular. • Now cut the rectangular veggies into slices. • The slices can be cut into even strips.
<p>Macédoine</p> 	<ul style="list-style-type: none"> • Cut the baton net/jardinière into cubes.
<p>Vichy</p> 	<ul style="list-style-type: none"> • Cut cylindrical veggies into discs.
<p>Tomato wedges</p> 	<ul style="list-style-type: none"> • Cut out the heart of the tomato. • Half the tomato length wise. • Cut each half in 3-4 wedges (depending on the size of the tomato).

<p>Peeling a capsicum (Bell Peppers)</p> 	<ul style="list-style-type: none"> • Slice off the very top of the capsicum. • Run the knife around the inside of the flesh to cut away the core. • Cut into quarters and place skin side down on a hot grill. • Grill until the skin blisters and turn partially black. • Seal in a plastic bag and let sweat for about 5-10min. • Remove from bag. The skin should now peel easily.
<p>Chopping Chilis</p> 	<ul style="list-style-type: none"> • Chilis can be cut into small rings and then finely chopped. • Chilis can also be cut lengthwise to remove the seeds and core before finely chopping the chilis.
<p>Slicing onions</p> 	<ul style="list-style-type: none"> • Peel the onion but keep the root intact. • Cut in half through the root. • Place the onion flat side down on a cutting board. Cut into slices.
<p>Roasting nuts and seeds</p> 	<ul style="list-style-type: none"> • Roasting nuts and seeds will give them a more intense flavour. • Roast on a baking tray in the oven, be careful not to burn the nuts/seeds.

10. GENERAL GUIDELINES; PREPARING AND SERVING SALAD.

1. Individual salads.

- Use a cold plat.
- The ingredients you use for the salad may not touch the edge of the plate.
- Try to get a good balance of colour and texture.
- Add height to the salad. This will make the salad look more appealing and interesting.
- Dishing up must be kept simple. Beware of too many focus points.
- Dress with salad dressing before serving OR serve salad dressing and salad separately.

2. Salads as part of a buffet.

- Ensure that the salad table looks appealing.
- Immediately clean when something is spilled/messed.
- Re-fill the salad bowls continuously.
- Dish up the salad in a simple yet appealing manner.
- Variety is key! Serve a wide variety of salads.
- Place additional olives, cheese, salad dressings, bread, and salty crackers on the table.
- Portions can be controlled by restricting the size of plates, serving spoons, and dressing spoons.
- The correct placement is important. Place plates first and sauces last.
- Use two spoons or a salad spoon- and fork for dishing leafy greens.
- The salads must be dished up in a salad bowl.