



## Chapter - VIII

### Sauces – Stock Based

#### Types of sauces

Broadly we can categorize the sauces into two categories: Hot and Cold Sauces

Hot sauces include:

- Roux sauces
- Starch thickened sauces.

Cold sauces include:

- Emulsion

#### Sauce ingredients

Sauces are made up of four kinds of ingredients.

1. Liquid – the body of the sauce.
2. Thickening agent.
3. Flavouring ingredients
4. Seasoning ingredients

#### The liquid

A liquid ingredient provides the base of most sauces.

The liquids on which most hot sauces are made include:

- White stock – for Velouté sauces.
- Brown stock – for Espagnole sauce.
- Milk – for Béchamel sauce.
- Tomato plus stock – for Tomato sauce.





The liquids on which most cold sauces are made include:

- Egg yolk, vinegar and oil – for Mayonnaise sauce.
- Clarified butter and egg yolk – for Hollandaise sauce.

### Thickening agents

- Starches such as flour are the most common thickening agents. Other thickening agents include egg yolks, cream, oatmeal, rice etc.
- The role of thickening agents is to improve the appearance, concentrate flavours and make dishes tasty.
- Roux is the most common thickening agent. For detail description of the roux, refer to your theory book.

### Flavouring ingredients

- The liquid in a sauce provides the basic flavour, but other ingredients are added to make variations to that flavour.
- By adding specific flavouring ingredients to basic sauces one can make various derivatives of a particular sauce.

### Seasoning ingredients

- Mainly Salt and pepper are used as seasoning agents.

### Assessing quality of ingredients

- Understanding ingredients is very important. Unless a sauce contains ingredients of the highest quality, it will not have the best possible flavour.
- Before you begin to make a sauce, check the quality of the ingredients. All ingredients should be fresh, and free from any contamination.
- Using poor quality ingredients can create a food safety problems, which may affect the health of the customers.
- Using poor quality ingredients will definitely affect the quality of the finished sauce and lead to customer dissatisfaction.





## Preparation of sauces

The preparation method used for making sauces will depend on the type of sauce you are making. Preparation methods may include the following techniques.

- Mixing - used to combine ingredients evenly through the sauce.
- Chopping/slicing - used either to cut the basic ingredients that provide the flavour, or to cut ingredients into fine pieces for garnish or final presentation.
- Whisking - beating rapidly to incorporate air and increase the volume.
- Grating - shredding ingredients into fine strands using a grater. This technique is appropriate for cheese.
- Blending - thoroughly combining two or more ingredients.
- Straining - removing solids from a liquid by passing it through a strainer.

## Roux sauces

- Roux is a combination of fat and flour used as a thickening agent for liquids.
- There are three cooking methods that may be used to prepare roux depending on the sauce it will be used for.

## White roux

Equal quantity of flour and butter, cooked together on a slow flame for about two-three minutes to a sandy texture without colour.

It will move from smooth to crumbly and back to smooth again – this will indicate that it is cooked.

Remove from the heat and allow the roux to cool before further use.

White roux is used in béchamel sauce, which is a blend of milk and white roux.

## Blond roux

Equal quantities of butter and flour blended together over a gentle heat until the mixture takes on a light, pale colour.



- Cook longer than a white roux.
- The roux is then removed from the heat to prevent over cooking and allowed to cool before further use.
- Blond roux is used as a base for Velouté, which is a blend of blond roux and white stock.

### Brown roux

- Equal quantities of butter and flour blended together and cooked over heat until the roux takes on a distinct brown colour.
- The mixture will start as a dry, crumbly mass, turning to a semi-liquid as the starch begins to break down and browning occurs.
- The roux is removed from the heat and allowed to cool before further use.
- Brown roux is used as a base for brown sauce, which is a blend of brown roux and brown beef stock.

### Evaluating quality

- Correct amounts of fat and flour – equal parts by weight – are important in the making of a good roux.
- All the starch granules must be coated with enough fat, but not too much.
- A roux must be cooked so that the finished sauce does not have the raw, starchy taste of flour.

## Starch thickened sauces

### Cornflour

- Cornflour is a thickening agent which when mixed with water or stock, and heated, provides a glossy, semi-clear finish to a product.
- It is used in preparing sweet sauces, served with meat and poultry, and in the preparation of some dessert sauces.





- It has roughly twice the thickening power of flour.
- To use, mix with cold water until smooth, stir into the hot liquid, bring to boil and simmer until the liquid turns clear and there is no starchy taste.
- Do not boil for a long period as the starch may break down and the liquid will thin out.

### Arrowroot

- Arrowroot is used like cornflour, but gives an even clearer sauce. Its use is limited because of its high cost.

### Beurre manié

- Beurre manié is used for a quick thickening agent.
- The sauce is thickened by a smooth blend of two parts whole butter, and one part flour, mixed cold.
- The mixture may be added in small pieces to a simmering liquid and continually whisked to achieve the desired consistency.
- The resulting sauce must be simmered 15 – 20 minutes until the flour is cooked out.
- Beurre manié may be used as an additional thickening agent for a sauce that is too thin.

### Egg yolk and cream liaison

- A liaison is a mixture of cream and beaten egg yolks that is added to sauces, to improve colour and texture, increase flavour and bind them together.
- The finished product must be held under 82°C or the eggs will curdle. For this reason, a liaison is usually added at the last minute to avoid the eggs curdling.
- Part of the sauce is whipped into a liaison until all the mixture is incorporated.



- To incorporate liaison:
  - remove the sauce from the heat
  - correct seasoning and strain if necessary
  - combine beaten egg yolks and cream
  - whip small amounts of sauce into liaison gradually until certain that the eggs will not curdle
  - incorporate liaison - sauce mixture with balance of sauce.
- Hold for service above 60°C for sanitation reasons but lower than 82°C.

### Veloute Sauce (Pale Sauce)

| S.No | Ingredients                 | Quantity |
|------|-----------------------------|----------|
| 1    | Butter                      | 60 gm    |
| 2    | Refined Flour               | 60 gm    |
| 3    | Stock (Chicken, Fish, etc.) | 01 lt    |
| 4    | Mushrooms                   | 25 gm    |
| 5    | Bay leaf                    | 01 no.   |
| 6    | Pepper corn                 | 3-4 no.  |
| 7    | Salt                        | To taste |
| 8    | Pepper                      | To taste |

#### Method:

1. Melt butter in a pan. Add flour, mix it well and cook on a slow flame till it become sandy in texture and pale in colour. (Blond Roux).
2. Add cold stock to the hot roux. Keep stirring with a wooden spoon to avoid lumps.
3. Add chopped mushrooms and sachet.



4. Simmer on a gentle heat stirring all the time with wooden spoon for ½ an hour.
5. Remove from the fire and pass through a fine strainer.
6. Add salt and pepper and.
7. Cover the sauce with melted butter to prevent skin formation.

### Espagnole Sauce (Brown Sauce)

| S.No | Ingredients   | Quantity |
|------|---------------|----------|
| 1    | Butter        | 70 gm    |
| 2    | Refined Flour | 70 gm    |
| 3    | Brown Stock   | 01 lt    |
| 4    | Tomato puree  | 40 gm    |
| 5    | Carrots       | 50 gm    |
| 6    | Onions        | 50 gm    |
| 7    | Celery        | 03 gm    |
| 8    | Parsley       | ½ sprig  |
| 9    | Bay leaf      | 01 no.   |
| 10   | Pepper corn   | 3-4 no.  |
| 11   | Salt          | To taste |
| 12   | Pepper        | To taste |

#### Method:

1. Melt butter in a pan. Add flour, mix it well and cook on a slow flame till it become golden brown in colour. (Brown Roux).
2. Add tomato puree. Add cold stock to the hot roux. Keep stirring with a wooden spoon to avoid lumps.



3. Saute mirepoix in little fat and add it to the sauce.
4. Simmer on a gentle heat stirring all the time with wooden spoon for about an hour.
5. Remove from the fire and pass through a fine strainer.
6. Add salt and pepper and.
7. Cover the sauce with melted butter to prevent skin formation.

### Tomato Sauce (Red Sauce)

| S.No | Ingredients   | Quantity |
|------|---------------|----------|
| 1    | Butter        | 70 gm    |
| 2    | Refined Flour | 70 gm    |
| 3    | Carrots       | 50 gm    |
| 4    | Onions        | 50 gm    |
| 5    | Celery        | 10 gm    |
| 6    | Bay leaf      | 01 no.   |
| 7    | Garlic        | 1 clove  |
| 8    | Tomatoes      | 50 gm    |
| 9    | Tomato puree  | 100 gm   |
| 10   | Brown Stock   | 400 ml   |
| 11   | Pepper corn   | 3-4 no.  |
| 12   | Salt          | To taste |
| 13   | Pepper        | To taste |

#### Method:

1. Melt butter in a pan. Add flour, mix it well and cook on a slow flame till it become golden brown in colour. (Brown Roux).



2. Add tomato puree and cook for 10-15 minutes on slow flame. Add chopped tomatoes and cook for 15 minutes.
3. Add brown stock. Add brown roux. Keep stirring with a wooden spoon to avoid lumps.
4. Saute mirepoix in little fat and add it to the sauce.
5. Simmer on a gentle heat stirring all the time with wooden spoon for about an hour.
6. Remove from the fire and pass through a fine strainer.
7. Add salt and pepper and.
8. Cover the sauce with melted butter to prevent skin formation.

## Sauces – Milk Based

### Bechamel Sauce (White Sauce)

| S.No | Ingredients   | Quantity |
|------|---------------|----------|
| 1    | Butter        | 60 gm    |
| 2    | Refined Flour | 60 gm    |
| 3    | Milk          | 01 lt    |
| 4    | Onion         | 01 no.   |
| 5    | Clove         | 3-4 no.  |
| 6    | Bay leaf      | 01 no.   |
| 7    | Nutmeg        | A pinch  |
| 8    | Salt          | To taste |
| 9    | Pepper        | To taste |

#### Method:

1. Boil the milk with cloute (onion studded with clove and bay leaf).



2. Melt butter in a pan. Add flour, mix it well and cook on a slow flame till it become sandy in texture. (Roux).
3. Add cold milk to the hot roux or hot milk to the cold roux to avoid lumps. Keep stirring with a wooden spoon.
4. Simmer on a gentle heat stirring all the time till it thickens.
5. Remove from the fire and pass through a fine strainer.
6. Add salt, pepper and nutmeg powder.
7. Cover the sauce with melted butter to prevent skin formation.

### Evaluating quality

If prepared properly, Béchamel sauce should meet the following quality points.

- Flavour – creamy, reflecting its base liquid, milk. Taste the sauce using a clean spoon for each tasting.
- Colour – should be that of heavy cream, slightly off-white, no hint of grey.
- Clarity – lustrous, with a definite sheen. Should be perfectly smooth with no graininess.
- Body – noticeable, thick enough to coat the back of a spoon yet still quite liquid.
- Aroma – that of cream. A slight hint of nuttiness from the roux will be apparent, but should not overpower the milk aroma.

## Sauces - Egg Based

### Hollandaise Sauce (Yellow Sauce)

| S.No | Ingredients      | Quantity |
|------|------------------|----------|
| 1    | Clarified butter | 300 gm   |
| 2    | Egg Yolks        | 02 no.   |
| 3    | Vinegar          | 10 ml    |



|   |               |            |
|---|---------------|------------|
| 4 | Peppercorns   | 4-5 no.    |
| 5 | Onions        | 20 gm      |
| 6 | Tarragon herb | 1-2 leaves |
| 7 | Salt          | To Taste   |
| 8 | Pepper        | To Taste   |

### Method:

1. Boil a vinegar reduction in a sauce pan along with crushed peppercorn, chopped onions, and tarragon. Reduce it to half. Add few drops of water and strain it.
2. Mix liquid with the egg yolks and mix well.
3. Place the bowl over simmering water or over a double boilert.
4. Whip using a whisk to a ribbon consistency.
5. Gradually add warm butter and continue whisking until a thick sauce appears.
6. Adjust seasoning and serve hot.

### Hollandaise sauce should meet the following quality points.

- Flavour – predominantly that of butter. The egg yolks contribute to the flavour. The reduction ingredients (vinegar, peppercorns, and seasonings) give a balanced flavour. Colour – should be a pale lemon colour.
- Clarity – opaque with a lustre and should not appear oily.
- Body – a buttery, smooth texture. A light consistency, without being too thick.





### Mayonnaise Sauce (Yellow Sauce)

| S.No | Ingredients    | Quantity  |
|------|----------------|-----------|
| 1    | Salad oil      | 300 ml    |
| 2    | Egg Yolks      | 02 no.    |
| 3    | Vinegar        | 10 ml     |
| 4    | Mustard powder | 5 gm      |
| 5    | Lemon Juice    | Few drops |
| 6    | Salt           | To Taste  |
| 7    | Pepper         | To Taste  |

#### Method:

1. Put Egg yolk, mustard powder and pepper in a round bowl.
2. Mix it well till it attains ribbon consistency.
3. Add oil continuously in a thin stream and whisk without stoppage.
4. Add vinegar in between to stabilize the emulsion.
5. Whisk it continuously till a firm sauce is formed.
6. Finish it with few drops of lemon juice and check the seasonings.

#### Evaluating quality

- A good mayonnaise is creamy and usually pale ivory in colour.
- It should be thick, however not stiff enough to hold shape.
- The flavour should have just a hint of vinegar or lemon juice. Taste the mayonnaise using a clean spoon for each tasting.
- Flavours of mustard should not overpower the flavour of the mayonnaise.

