

Objectives:

After completion of this unit you should be able to understand:

- The meaning and definition of sauce.
- Classification of sauces and their preparations.
- Recipes of mother sauces.
- Uses of Sauces
- Storage and Precautions taken in making sauces.

STRUCTURE

6(C).1 Introduction

6(C).2 Sauces

6(C).2.1 Importance of Sauces

6(C).3 Thickening Agents used in Sauces

6(C).4 Mother Sauces

6(C).5 Béchamel Sauce

6(C).5.1 Preparation of *Béchamel* Sauce

6(C).6(C) Brown (Demi-Glace) or *Espagnole* Sauce

6(C).6(C).1 Preparation of *Espagnole*

6(C).7 *Velouté* Sauce

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6(C).8 Tomato Sauce

6(C).8.1 Preparation of Tomato Sauce

6(C).9 Emulsions

6(C).9.1 *Hollandaise* Sauce

6(C).9.1.1 Preparation of *Hollandaise* Sauce

6(C).9.2 *Mayonnaise*

6(C).9.2.1 Preparation of *Mayonnaise*

INTRODUCTION

“Sauce is to culinary art, what grammar is to language”

- Grimande De La Royere

The word "sauce" is a French word that means a relish to make our food more appetizing. Sauces are liquid or semi-liquid foods devised to make other foods look, smell, and taste better, and hence be more easily digested and more beneficial. Because of the lack of refrigeration in the early days of cooking, meat, poultry, fish, and seafood didn't last long. Sauces and gravies were used to mask the flavor of tainted foods. Sauces are one of the fundamentals of cooking.

Sauces may be prepared. Sauces, such as soy sauce, which are usually bought, not made, by the cook; or cooked sauces, such as Béchamel sauce, which are generally made just before serving. Sauces for salads are called salad dressing. Another variation is the pan sauce; this is made by adding an aromatic (such as chopped shallot) to a pan that has previously cooked meat, which has left hardened juices (called the fond) in the pan.

SAUCES

Sauce is a thickened liquid that is flavored or seasoned to enhance the flavor of the food that it is to accompany. The sauce can be sweet, sour, spicy, or savory and may be added to the food to become part of a main dish or used as an accompaniment to the food being prepared. Sauces add a variety of features to foods, such as complimenting or enhancing flavors, succulence, attractive appearance, and additional texture.

Importance of Sauces

- (i) A sauce enhances flavor.
- (ii) Sauce like white sauce adds creaminess to firm and dry food thus giving moistness the food.
- (iii) Sauces like mint sauce, apple sauce with roast pork help in digestion.
- (iv) Sauce add colour to the food.
- (v) Sauce served as an accompaniment, sometimes gives a contrast taste to another food.
- (vi) Sauce enhances the nutritional value of the dish.
- (vii) Sauce gives tartness and contrasts or balances a bland food. Example: Devil sauce served with eggs gives appealing tartness.
- (viii) Sauce makes food more palatable.

THICKENING AGENTS USED IN SAUCES

Sauces, unless they're jus type sauces, shouldn't be thin and watery. There are many ways to thicken a sauce. The following are the few sauce-thickening agents:

Cornstarch - Cornstarch is actually flour. It is the endosperm of corn kernels that has been dried and ground, much the same way that wheat flour is made (in England cornstarch is actually called cornflour). Like other flours, cornstarch makes a good thickening agent. It is frequently used in Asian cooking and a clear sheen is typical of sauces thickened with cornstarch.

Flour and making a roux - Used as a thickening agent for sauces, the traditional roux is equal amounts of flour and a fat (usually butter) cooked together. The length of time that the flour is cooked depends on the color of the sauce being made. Cooked for a short time, the roux has little color and is used for white sauces. As cooked longer, the flour browns and results in a darker sauce.

Eggs yolks and cream – Yolks or cream are added as a finishing agent at the end of cooking. The product is never boiled, when liaison is added, or it would curdle. The liaison is added to thicken delicate cream or velout sauces or cream soups.

MOTHER SAUCES

Mother sauces are also called *Grand Sauces*. These are the five most basic sauces that every cook should master. Antonin Careme, founding father of French "grande cuisine," came up with the methodology in the early 1800's by which hundreds of sauces would be categorized under five Mother Sauces, and there are infinite possibilities for variations, since the sauces are all based on a few basic formulas. The five Mother Sauces are:

- **Béchamel** - sauces that are made with milk and pale roux. Common sauces in this group include Crème, Mornay and Soubise.
- **Brown (demi-glace) or Espagnole** - sauces that are brown stock-based, such as brown sauces. Common sauces in this group include bordelaise, chasseur, chateaubriand, diable, diane, estragon, lyonnaise, *madère*, madeira, and zingara.
- **Velouté** - sauces that are made with white stock and roux. Common sauces in this group include allemande, ravigote, *suprême*, and white bordelaise.
- **Red or Tomato Sauces** - tomato based sauces. Common sauces in this category include spaghetti sauce, marinara and a wide variety of tomato sauces.
- **Emulsions** - sauces that are emulsified such as *hollandaise* or *mayonnaise*.

BÉCHAMEL SAUCE

Béchamel sauce (pronounced (bay-shah-mel) also known as white sauce is usually made today by whisking scalded milk gradually into a white flour- butter roux, though it can also be made by whisking a kneaded flour-butter *beurre manié* into scalded milk. The thickness of the final sauce depends on the proportions of milk and flour. Sauce *béchamel* is one of the very few French sauces that is easy to prepare but is flavorful and delicate enough to serve on its own or as the basis for some fifty more complex sauces. This sauce, is widely used with vegetables, eggs, fish, poultry, hot hors d'oeuvres and dishes that are finished under the grill.

Béchamel sauce is the base for a number of other classic sauces including: Mornay sauce (cheese); Nantua sauce (shrimp, butter and cream); *Crème* sauce (heavy cream); Mustard sauce (prepared mustard); Soubise sauce (finely diced onions that have been sweated in butter); Cheddar cheese sauce (cheddar cheese, dry mustard, Worcestershire sauce)

Preparation of Béchamel Sauce

Béchamel sauce can be prepared in two ways. The first recipe that follows is considered traditional and takes more than an hour to prepare. The second is a quick method and will take only about 5 minutes. Some people prefer the first method. Others say that it is impossible to tell the difference between the two. Cooks can try both methods at least once before deciding on which method best suits their needs.

***Béchamel Sauce* - Traditional Method**

Clarified butter	5 Tbsp.
Very lean veal, cut in small dice	50 gms
Flour	5 Tbsp
Milk, brought to a boil before using	3 cups
Onion, chopped	2 Tbsp
Thyme	1 small sprig
Bay leaf	1
Nutmeg	1 pinch
Salt and White pepper to taste	to taste

1. In a small skillet melt 1 Tbsp. of the butter and in this cook the veal gently without allowing it to brown.
2. In a saucepan melt the remaining butter and to this add the flour and cook together over a low flame, stirring constantly

with a wooden spoon for 5 minutes.

3. To this mixture (which is known as a "roux"), add the boiling milk, mix well, add the veal and remaining ingredients and simmer very gently for 45 minutes to 1 hour. Strain through a cloth.

4. If not using the sauce immediately, float a thin film of milk or melted butter on the top of the sauce and set aside uncovered or keep it hot by placing it in the top pot of a double boiler over hot but not boiling water.

BROWN (DEMI-GLACE) OR *ESPAGNOLE* SAUCE

The basic method of making *espagnole* is to prepare a very dark brown roux, to which are added several gallons of veal stock or water, along with 20–30 lb (9–14 kg) of browned bones, pieces of beef, many pounds of vegetables, and various seasonings. This blend is allowed to slowly reduce while being frequently skimmed. The classical recipe calls for additional veal stock to be added as the liquid gradually reduces but today water is generally used instead. Tomato sauce is added towards the end of the process, and the sauce is further reduced.

Espagnole has a strong taste and is rarely used directly on food. As a mother sauce, however, it then serves as the starting point for many derivative sauces. A typical *espagnole* recipe takes many hours or even several days to make, and produces four to five quarts of sauce. In most derivative recipes, however, one cup of *espagnole* is more than enough, so that the basic recipe will yield enough sauce for 16 to 20 meals. Frozen in small quantities, *espagnole* will keep practically indefinitely.

Preparation of *Espagnole*

Espagnole

Yield	1 liter
Fat	30 gm
Flour	70 gm
Tomato puree	30 gm
Brown stock	1¼ gm
Mirepoix	1 cup
Fresh pork rind finely chopped	3 gm
Parsley, Celery and Bay Leaf	1 no.

VELOUTÉ SAUCE

Velouté or blond sauce is basically a *bechamel* sauce made with stock instead of milk. In preparing a *velouté* sauce, a light stock (one in which the bones used have not been roasted), such as

chicken, veal or fish stock, is thickened with a blond roux. Thus the ingredients of a velouté are butter and flour to form the roux, a light chicken, veal, or fish stock, salt and pepper for seasoning. Commonly the sauce produced will be referred to by the type of stock used e.g. chicken *velouté*.

It is often served on poultry or seafood dishes, and is used as the base for other sauces. Sauces derived from a *velouté* sauce include allemande sauce (by adding lemon juice, egg yolks, and cream), *suprême* sauce (by adding mushrooms and cream to a chicken *velouté*) and berycy sauce (by adding shallots and white wine to a fish *velouté*).

Preparation of Velouté Sauce

Yield	1 $\frac{3}{4}$ cup
White stock (veal, chicken, or fish)	1 $\frac{1}{2}$ cup
Unsalted butter	2 tbsp
Flour	3 tbsp
Salt & Pepper	to taste

1. In a medium sized saucepan melt the butter.
2. Remove the pan from the stove and quickly stir in the flour.
3. Return the pan to the heat and cook the paste mixture, stirring frequently until it turns pale and straw-like in colour. This should take several minutes.
4. Take the pan off the heat again and whisk or stir in half of the stock. Make sure that the paste has dissolved and a liquid has formed without any lumps.
5. Return the pan to the heat and stir in the remaining stock. Bring the liquid to a gentle simmer.
6. Reduce the heat but continue to simmer the sauce for about 25 minutes, stirring from time to time and skimming off any skin that forms on the top.
7. Once the sauce has reached the desired consistency, season with salt and pepper and strain the sauce through a sieve.

TOMATO SAUCE

A tomato sauce is any of a very large number of sauces made primarily out of tomatoes, usually to be served as part of a dish (rather than as a condiment). Tomato sauces are common for

meat and vegetables, but they are perhaps best known as sauces for pasta dishes.

Tomatoes have a rich flavor, a low liquid content, very soft flesh which breaks down easily, and the right composition to thicken up into a sauce when they are cooked (without the need of thickeners like roux). All of these make them ideal for simple and appealing sauces.

The simplest tomato sauces consist just of chopped tomato flesh (with the skins and seeds optionally removed), cooked in a little olive oil and simmered until it loses its raw flavour, and seasoned with salt.

Water (or another, more flavorful liquid such as stock or wine) is often added to keep it from drying out too much. Onion and garlic are almost always sweated or sauteed at the beginning before the tomato is added. Other seasonings typically include basil, oregano, parsley, and possibly some spicy red pepper or black pepper. Ground or chopped meat is also common.

Sauces derived from tomato sauce are: Bretonne; Tomated Chaudfroid; Portugaise; Italienne; Barbecue; Green tomato sauce; Salsa; Puttanesca; Tomato gravy.

Preparation of Tomato Sauce

Yield	1 cup
Fresh tomatoes	1 kg
Olive oil	1 tbsp
Onion peeled and chopped	1
Garlic cloves peeled and crushed	3
Brown sugar	
Salt and freshly milled black pepper	To taste

1. Put the tomatoes in a big bowl. Pour boiling water over the tomatoes until everyone is submerged. After a few minutes drain the tomatoes and hold them under running cold water. Slip their skins off.

2. Heat the oil in a medium saucepan, then add the onion and garlic and let them gently cook for 5-6 minutes, until they are softened and golden. Now add the tomatoes. Simmer the tomatoes on a very low heat, without a lid for 1½ hours or until all the liquid had evaporated and the tomatoes are reduced to a thick, jam-like consistency, stirring now and then.
3. Add salt and pepper to taste.
4. If the sauce is extremely acidic add brown sugar in teaspoon increments.

EMULSIONS

Emulsion is a mixture of two liquids that normally can't be combined. Combining oil and water is the classic example. Emulsifying is done by slowly adding one ingredient to another while simultaneously mixing rapidly. This disperses and suspends tiny droplets of one liquid through another. However, the two liquids would quickly separate again if an emulsifier were not added. Emulsifiers are liaisons between the two liquids and serve to stabilize the mixture. Eggs and gelatin are among the foods that contain emulsifiers. In mayonnaise, the emulsifier is egg yolk, which contains lecithin, a fat emulsifier. Emulsion sauces are hollandaise and mayonnaise.

Hollandaise Sauce

Hollandaise Sauce (pronounced HOL-uhn-dayz). This is an emulsion of butter and lemon juice using egg yolks as the emulsifying agent, usually seasoned with salt and a little black pepper or cayenne pepper. It is served hot with vegetables, fish, and

eggs (like egg benedict). It will be a pale lemon color, opaque, but with a luster not appearing oily. The basic sauce and its variations should have a buttery-smooth texture, almost frothy, and an aroma of good butter.

Hollandaise requires some skill and knowledge to prepare; care must also be taken to store it properly after preparation.

Properly made, the sauce should be smooth and creamy. The flavor should be rich and buttery, with a mild tang added by the lemon juice and seasonings. It must be made and served warm, not hot. If the ingredients are emulsified improperly by over-or under-heating them they will separate, resulting in the sauce "breaking" from the emulsion and the yolks coagulating from excessive heat. The sauce may be portioned and frozen for future use. When ready to use, let it come to room temperature; some stirring may be required.

The following list is a non-exhaustive listing of minor-sauces created by adding ingredients to Hollandaise Sauce (as a 'mother sauce'): Sauce Mousseline; Sauce Béarnaise; Sauce Maltase; Sauce Divine; Sauce Noisette; Sauce Bavaoise; Sauce Colbert.

Preperation of *Hollandaise* Sauce

Yield	1 cup
White-wine vinegar	2 tbsp
Cold water	2 tbsp
Salt	¼ tsp
White pepper	to taste
Egg yolks	3
Unsalted butter, cut into tbsp. pieces	1 cup
Softened fresh lemon juice	2 tbsp
Cayenne	¾ tsp

1. Boil vinegar, 2 tablespoons water, salt, and white pepper in a 1½-quart heavy saucepan until reduced to about 2 tablespoons. Remove from heat and stir in remaining tablespoon water.
2. Whisk in yolks, then cook over very low heat, whisking constantly, until thickened (be careful not to scramble yolks), about 1 minute. Whisk in butter 1 piece at a time, lifting pan occasionally to cool sauce and adding each piece before previous one is completely melted.
3. Remove from heat and whisk in lemon juice, cayenne, and salt to taste.

Mayonnaise

Mayonnaise (often abbreviated mayo) is a thick condiment, whitish-yellow in color. *Mayonnaise* is a basic cold sauce. It is used as a salad dressing and as an accompaniment.

Mayonnaise is made by combining lemon juice or vinegar with egg yolks. Eggs (containing the emulsifier lecithin) bind the ingredients together and prevent separation. Then, oil is added drop

by drop as the mixture is rapidly whisked. Adding oil too quickly (or insufficient, rapid whisking) will keep the two liquids from combining (emulsifying). But, as the sauce begins to thicken, oil can be added more rapidly. Seasonings are whisked in after all of the oil has been added. Worldwide, mayonnaise is most commonly served in a sandwich, or with salad such as potato salad or canned tuna ("tuna mayo" or tuna salad). Numerous other sauces can be created from it by adding additional seasonings.

Mayonnaise is the base for many other chilled sauces and salad dressings. For example:

- Aioli is olive-oil *mayonnaise* combined with garlic.
- Rouille is aioli with added red pepper or paprika.
- Tartar sauce is *mayonnaise* spiced with pickled cucumbers and onion. Capers, olives, and crushed hardboiled eggs are sometimes included. A simpler recipe calls for sweet pickle relish and more lemon juice.
- Fry sauce is a mixture of *mayonnaise*, ketchup or another red sauce.
- Mayonesa is a lime-flavored *mayonnaise*, usually found in Mexican or Spanish grocers in North America.
- Ranch dressing is made of buttermilk or sour cream, *mayonnaise*, and minced green onion, along with other seasonings.
- Honey Mustard is made primarily of *mayonnaise* and includes lemon juice, mustard, and brown sugar.

Preparation of *Mayonnaise*

Egg yolks	2
Vegetable or olive oil	340 ml
Lemon juice or white wine vinegar	1 tbsp.
Dijon mustard	1-2 tsp
Salt and pepper	To taste

1. In a large mixing bowl whisk together the egg yolks with a pinch of salt.
2. Add one drop of oil to the egg yolks and whisk together with an electric whisk.
3. Continue to add one drop of oil at a time, whisking continuously until the mixture begins to blend together and thicken. The process is to add one drop of oil and then blend it in before adding the next drop. This will take several

minutes.

4. After a quarter of the oil has been blended, add the lemon juice or vinegar and beat into the mixture.
5. Continue to whisk in the remaining oil, which you should be able to add a lot quicker by now, in a thin stream.
6. Once all the oil has been beaten in, add the mustard to give extra taste and season with salt and pepper.
7. If the mayonnaise is too thick, you can whisk in a few teaspoons of boiling water.
8. Chill the mayonnaise in the refrigerator before serving.

LET US SUM UP

Sauce is liquid or sometimes semi-solid food served on or used in preparing other foods. Sauces are not consumed by themselves; they add flavor, moisture, and visual appeal to another dish. Sauce is a French word taken from the Latin *salsus*, meaning salted. Sauces need a liquid component, but with dishes such as pasta can contain more solid elements than liquid.

Initially perfected by the French, all sauces are now universally categorized into one of 5 groups of sauces serving as a base or foundation for other sauces and referred to as the Grand or Mother Sauces.

The five mother sauces are: **Béchamel** sauces that are made with milk and pale roux. Common sauces in this group include *crème*, mornay and soubise. **Brown (demi-glace) or Espagnole** - sauces that are brown stock-based, such as brown sauces. Common sauces in this group include bordelaise, chasseur, chateaubriand, diable, diane, estragon, lyonnaise, *madère*, Madeira, moscovite, mushroom, piquante, porto, *robert*, romaine, tarragon, and zingara. **Velouté** - sauces that are made with white stock and roux. Common sauces in this group include allemande, ravigote, *suprême*, and white bordelaise. **Red or Tomato Sauces** - tomato based sauces. Common sauces in this category include spaghetti sauce, marinara and a wide variety of tomato sauces. **Emulsions** - sauces that are emulsified such as *hollandaise* or *mayonnaise*.