

BAKERY AND CONFECTIONARY:

BAKERY:

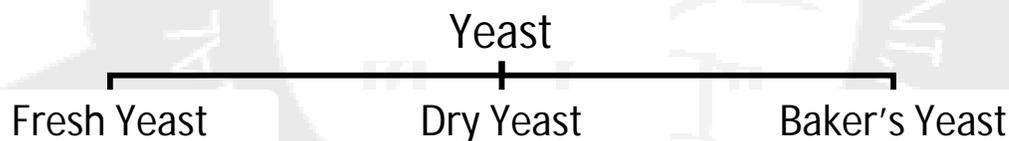
Bread making- ingredients used to make bread are yeast, flour, sugar, fat and liquid. The bread making techniques are kneading, proofing, knocking down back, shaping, second proofing, glazing, and baking. The different breads made are leaves, dinner roles, bread sticks, twists trefoil, whole meal bread, fruit bread, hot cross buns etc.

Bread has for a long time been described as the staff of life in much culture and it is eaten at almost every meal in some form or another. The concept of the word is wide ranging and can be introduced by such factor as the ingredients use (Particularly the flour) and the shape and whether it is sweet, savory or even sour dough.

A. Yeast:

Yeast is available in several varieties, compressed yeast has a greyest pudding like appearance and its perched aged fresh. Yeast is a micro organism. It is in the air and on every surface - it is all around us and its job in this world is to break things down in a process of fermentation. It eats things and, just like humans, it emits gas in the form of carbon dioxide as a result.

Classification of Yeast:



Fresh yeast and dry yeast are used in domestic purpose.
Baker's yeast used in industrial purpose.

Action of yeast:

Yeast is a micro organism that reproduced by a budding process, by product of this growth process are responsible for the dough rising. For growth yeast cells need to have the following condition available.

Food:- Food in the form of sugar and gluten (naturally presented in the flour).

Warmth:- Provided by the temperature of the liquid used as an conditioner for proofing the dough.

Moisture:- Supplied by the liquid used.

Oxygen:- Taken from the atmosphere.

When all those conditions are met, the yeast began to multiply and is seen to be "alive". During this process it produces a product in the form of Carbon-dioxide. This gas allowed the dough to rise by pushing the mixture upward. The yeast should be alive to preserve the dough. Avoiding using too much of salt to prevent budding. Too much sugar shrinks the yeast cells and inhibits growth, 24-35°C is required by yeast to multiply. Above 50°C will kill the yeast before it is baked and cold temperature returns the growth process.

Warm temperature can be reduced in a kitchen in several ways either by preheating the room, using warm utensils or by slightly warming the floor beforehand. Dried yeast has had the moisture removed from it and has a fine bread-like appearance. It is mixed with warm liquid to activate the yeast.

Working techniques:

1. **Creaming:**

- a) Mixing fat and sugar.
- b) Aim is to make mixture lighter by incorporating air.
- c) Fat should be soft and not oily.
- d) Used to more large bowl for easy movement.

2. **Rubbing-in:**

- a) Fat and flour are rubbed together.
- b) Fat is reduced to break curbs sized particles.
- c) Fat particles melt during baking, giving off steam which makes the pastry, explained and rise.

3. **Folding:**

- a) Dry ingredients are added to a creamed or whisked mixture.
- b) Add gradually and turn gently.
- c) Disturb the air bubble as little as possible.

4. **Docking:**

- a) Small holes are made in pastry.
- b) Allow to steam passing during baking period.

B. Wheat/flour:

It is one of the structural ingredients used in flour confectionery. To achieve reliable results to choose the correct type of flour with the required strength. Cooks often refer to flour as strong or weak. This term indicates they contain the non-soluble protein (gluten) which is present in the flour. Without gluten there would be no such thing as rising bread. Gluten gives dough the elastic property which helps to entrap air and gas during the baking process to form the sponge-like character supporting the product. The gluten strength in flour can be altered by using different types of methods of manipulation. As an example, kneading or by adding ingredients such as acid (e.g. lemon juice) which will soften the gluten. Gluten can also be perceived as a chemical product and added to flour to increase its strength.

Strong flour: The gluten percentage in this flour is 10-11.5%. They can absorb more water than wheat flour. Gluten protein absorbs about twice or thrice its own weight of water. They are used for products which will have a high rise such as yeast medium. Strong flour is also known as herb flour or baker flour.

Weak flour: The percentage of gluten in this flour is 7-8.5%. They are most suitable for producing item of a shorter and denser texture such as cakes, biscuits, sponges, soft and sweet patties, pastry etc. Weak flour is also known as soft flour and cake flour.

Self-rising flour: This flour usually is of medium strength flour basically used in daily life.

C. Sugar:

Sugar is obtained from sugar cane plant. The space of this plant is obtained by or using the plant under rolls or rollers and then it heated and it to get rid of excess moisture. In this process the liquid get partly caramelized then it's put into certain few machine where the sugar and the molasses are used to manufacture of RAM and sugar is processed to make the following-

1. Large grain sugar,
2. Medium grain sugar,
3. Fine grain sugar,
4. Castor sugar,
5. Powder sugar,
6. Sugar cube,
7. Sugar solution,
8. Sugar syrup,
9. Caramel,
10. Sugar pop.

Use of sugar:

1. as a preservative,
2. Stabilizer,
3. Colouring agent (Caramel colour),
4. Sweating agent,
5. As a bulking agent
6. The ability of sugar to crystallize, gives a delightful variety in cookery.
7. To raise the boiling point or lower the freezing point.
8. Makes cakes light and open textured

Oven temperature chart:

Term	Temperature	
	C	F
Very cool	120c	250f
Cool	150c	300f
Moderate	160c	325f
Moderately hot	200c	400f
Hot	230c	450f
Very hot	240c	475f

D. Liquid Sweeteners:

Liquid sweeteners include various syrups, honey, and molasses.

Liquid sweeteners are typically less expensive than dry nutritive sweeteners.

The following are some of the liquid sweeteners:

Barley Malt Syrup:

This tastes a bit like molasses, and it's not as sweet as sugar or honey.

It's mostly used to make beer, but it's also used to make breads or other baked goods.

Blackstrap Molasses:

This has a strong, bitter flavor, and it's not very sweet. It's sometimes used to make chili.

Brown Rice Syrup:

Health buffs like this because it contains complex sugars, which are absorbed more slowly into the bloodstream. It's about half as sweet as ordinary table sugar.

Coconut Syrup:

Hawaiians like to pour this syrup on pancakes, but it's also used in several mixed drinks.

Corn Syrup:

This is a thick, sweet syrup that's popular in America, but hard to find in other countries. Unlike other sweeteners, corn syrup doesn't crystallize and turn grainy when it's cold, so it's a good choice for frostings, fudge sauces, and candies. Baked goods made with corn syrup are moister and stay fresher longer than those made with sugar.

Dark Corn Syrup (Dark Karo Syrup):

This corn syrup has a mild molasses flavor, and it's a common ingredient in barbecue sauce, pecan pie.

Orgeat (pronounced OR- zhat):

This sweet almond- flavored syrup is used in many mixed drinks.

Maple Syrup:

It is made from the sap of sugar maples; maple syrup is a traditional topping for pancakes, waffles, and French toast. It's also used to make candies, frostings, candied yams, meat glazes, and baked beans. Lighter syrups usually have a more delicate flavor.

Simple Syrup (Sugar Syrup):

This is a mixture of sugar and water that's brought to a boil and simmered for about five minutes so that the sugar dissolves and the mixture becomes syrupy. When it cools, it's used to make mixed drinks, liqueurs, baked goods,

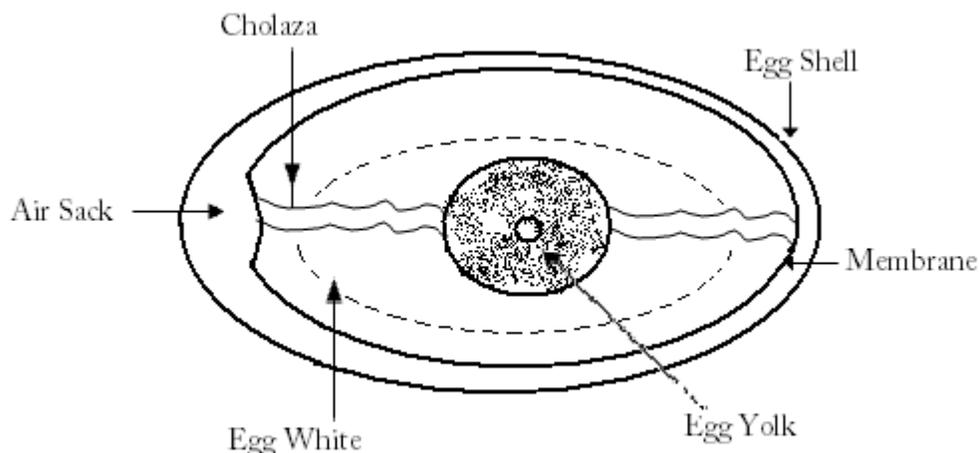
sorbets, sauces, and many other things. The thickness of the syrup depends upon the ratio of sugar to water used.

E. Egg:

Uses of Eggs

- 1) Binding - A binder helps other ingredients bind together. Eggs are used to help bind together meatballs, meatloaf and flour mixtures. When eggs are heated they coagulate, this helps stick together the ingredients they are mixed with.
- 2) Coating - The eggs or egg batter help to give a coat to the food items and prevent them from disintegrating and gives them a protective coating. Many of the food items, such as fish fillets, cutlets etc, are dipped into the batter before crumbing and then fried. Eggs are also used for preparing pancake batters (eggs, flour and milk).
- 3) Leavening - By beating the egg whites a foam is made up of air bubbles, surrounded by a thin elastic film of egg white. This mixture, when added to products such as sponge cakes, meringues, soufflés etc increases the volume and the egg white film hardens.
- 4) Emulsifying - Eggs are the emulsifiers that give a smooth mayonnaise sauce. It is also used as an emulsifier in icecreams, cakes, cream puffs etc.
- 5) Thickening - Eggs help to improve the consistency of gravies, curries, sauces and soups. Egg liaisons used in soups and sauces help to thicken and improve the consistency. When used in custards, the heat coagulated the eggs and makes the custard firm.
- 6) Decoration and Garnishing - Slices, sieved or quarters of boiled eggs are used to decorate or garnish dishes such as: salads, briyanis, curries, vienna steaks etc.
- 7) Clarifying - Consommés are clarified with egg whites.

Egg is a good source of Vit'D' and contain high quality protein that is called "Albumin".



Egg shows the following parts:

1. Egg shell,
2. Egg membrane,
3. Air sack,
4. Egg white,
5. Egg yolk,

CONFECTIONARY:

Confectionery is the art of making confections, which are food items that are rich in sugar and carbohydrates. Exact definitions are difficult. In general, though, confectionery is divided into two broad and somewhat overlapping categories, **bakers' confections** and **sugar confections**.

Bakers' confectionery, also called flour confections, includes principally sweet pastries, cakes, and similar baked goods. In the Middle East and Asia, flour-based confections are more dominant.

Sugar confectionery includes sweets, candied nuts, chocolates, chewing gum, sweetmeats, pastillage, and other confections that are made primarily of sugar. In some cases, chocolate confections (confections made of chocolate) are treated as a separate category, as are sugar-free versions of sugar confections. The words candy (US and Canada), sweets (UK and Ireland), and lollies (Australia and New Zealand) are common words for the most common varieties of sugar confectionery.

Basic of good pastry required for mixing techniques. There are different types of pastry are- (1) Soft pastry/Sweet short pastry, (2) Puff pastry, (3) Folio of pastry, (4) Hot water pastry.

Ingredient for making a pastry (General):

Main basic ingredient for pastry are- flour, butter, sugar and rising agent (Baking powder).

Principle of pastry making:

1. Good mixing techniques are the basic of good pastry. All the pastry dough should be mixed directly on a marble slab or smooth stone slab. Majority of the pastry dough need cool condition, exceptional of hot water pastry.
2. The ratio of flour to fat depends on the type of pastry; dry ingredients must be made slowly.
3. It is important to have the current amount of liquid for mixing. The amount of water should be adjusted according to the different types of flour.
4. Dough is need rising and resting and they should be allowed to relax after rolling.
5. Rolling out-spurling the just strong flour to prevent dough from sticking of the job.
6. Roll with strong forward strokes.
7. Do not roll over the edged specially when rolling the puff pastry.
8. Do not turn the pastry over but turn the pastry around.
9. When baking oven must be allowed pre-heated to the current temperature before placing any pastry in the oven.

Flavour:

In French term "Savior" it's known as flavouring agent.

The product is produced when the food come in contact on the savior. There are four basic taste- sweet, salty, sour, bitter and other taste like chilly taste. The path of flavour of a dish comes from the combination of several of this basic taste and when and where the production is needed is described. There are several different kinds of flavour which can be broadly classified as natural and artificial.

Example:- nature sweet (sugar), artificial (dusting sugar).

Colour:

They are also known as colouring agent and it is used in confectionary, bread making, dairy production, drinks also. Their function is essentially play a role to give the product appetizing and appealing appearance. It is divided into two groups- (1) Natural colour, (2) Synthetic colour.

Gelatin:

It is a colourless substance obtained from bone and cartilage of animal, agar, alginates etc. Gelatin can either be in form of powder or liquid. It is (powder) shocked in cold water before using. Gelatin is used for making of jelly, ice related dessert, aspic jelly and also used for making of wine and fruit juices and industrial used in confectionary product.

Baking powder:

Baking powder may be made from sodium-bi carbonate to two parts of cream of tartar. Chemical action is brought about by the production of carbon-die-oxide from the action in solution of alkali and acid in the presence of heat. The method of action, the greater amount of gas (CO₂) should be generated after heat has been applied. Example.- Dough are in the oven.