



## Chapter-8

# Bread Making

### Learning Objectives :-

After completing this chapter learners would be able to:

1. List the ingredients and method of Bread Making
2. Explain different types of Bread Making.



fig. 1

### Types of Breads:



fig. 2



fig. 3



**Introduction :** Bread forms a common part of the food all over the world. Bread can be eaten by all the age groups as it is soft and fluffy it can be eaten without further processing. different breads may range from less price to expensive. eg. Pita bread. Bread is prepared by baking of the flour which could be coarse to fine. Bread can be prepared mainly from wheat. The skill to make bread involves an understanding of the important ingredients and different methods of preparations.

## I. Ingredients:

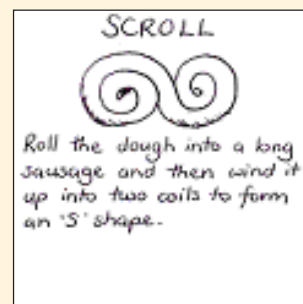
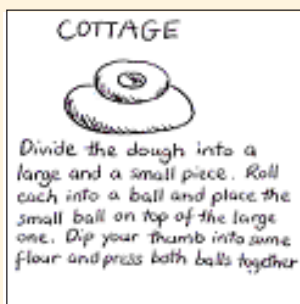
- 43



- 6g dried yeast
- 150 ml warm water approx.

## II. Method

1. Collect all the ingredients together.
2. Put the flour in the mixing bowl and add the sugar and the salt.
3. Add the margarine and rub into the flour using your finger tips.
4. Add the dried yeast and stir into the flour mix.
5. Add all the water at once to the flour mix and stir together using the wooden spoon.
6. Use your hands as the dough gets tough and when it leaves the sides of the bowl clean (add a little more flour if it is too sticky), put the dough onto a floured surface.
7. Now the hard work! The dough will feel tight and lumpy and you must 'knead' it to make it smooth and stretchy. Push your hands into the dough, gather it back into a ball, turn it slightly and then repeat. Do this for about 5 minutes until the dough feels smooth.
8. Shape the dough into your own design or use one of the ideas below and place it on the greased baking tray.



9. Cover the shape with the oiled cling film to stop it drying out and then put the tray in a warm place so that the yeast can work and make the dough rise. In winter this might be the airing cupboard, or in summer the kitchen itself may be warm enough.
10. Now set the oven to 230°C/450°F/Gas Mark 8.
11. When the loaf shape has about doubled in size (after about 30 minutes), remove the cling film and place the tray in the centre of the oven.
12. Bake the loaf for 20-25 minutes. It should be golden brown and sound hollow when tapped underneath.



13. Put the loaf on a wire rack to cool and the tuck in!

### III. Process:



(i)



(ii)



(iii)

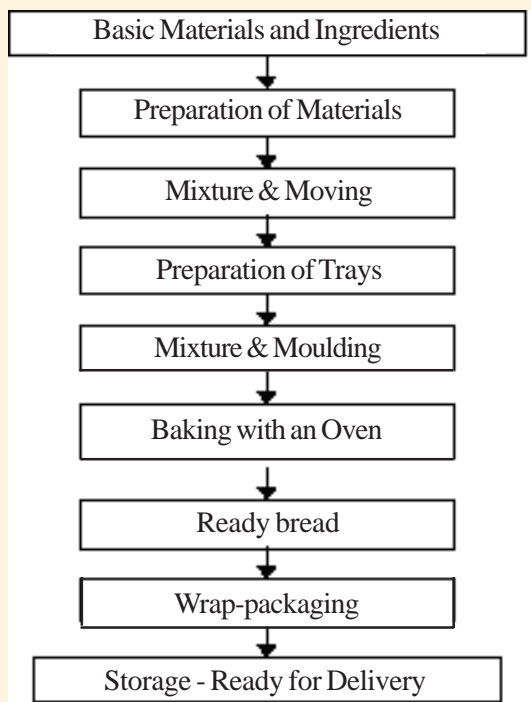


(iv)



Sequence of Different Stages of Bread making





**FLOW CHART**

#### **IV. BREAD MAKING METHOD:**

- Sponge and dough process
- Straight dough process
- Salt delayed method
- No-dough time method
- Ferment and dough process

##### **a) SPONGE & DOUGH PROCESS:**

Which a sponge is first set, by using one-half of the flour, required amount of water, yeast, sugar, make a mixture that will just drop from the hands when taken up.

This mixture is called the sponge and is set to rise at a temperature of 80°F, when it is about doubled in volume air bubbles will be seen breaking on the surface & the sponge will begin to fall.

As soon as the sponge is ripe, pour in the remaining water after dissolving it in the sugar and salt to be used. Fat should be added at this time. After the sponge is well broken up and no stringy portions remains, add the remaining flour.

Mix the whole, which now becomes the dough until it becomes a stiff, elastic mass. Set to prove at a temperature of 80° F.

When the dough starts rising to the top of the trough and has fallen 1 inch it should be punched the first time. Allow to rise the second time until nearly to the top of the trough it is now ready to be rounded up on the bench or molded into loaf.

The loaves should be rounded up and allowed to proof about 15-20mins on the bench.

The molded loaves should be firm and about fill about half the pan. Set to proof at 80°F. when the loaves are about double its size they are ready for the oven baking.

### **b) STRAIGHT DOUGH METHOD:**

By the straight dough process all the ingredients are incorporated in one long process.

Take all the flour, water, yeast, sugar, and salt and fat to be used.

When the dough is thoroughly kneaded allow it to proof. It will be ready to punch the first time in about 5 hours, punch & allow to proof.

Punch second time and rise 20 minutes .the dough is now ready to be rounded upon the bench and moulded for final proof.

### **c) NO - TIME DOUGH METHOD:**

Use a bread conditioners or improver to chemically induce the dough to create a softer product since you are doing away with the intermediate proofing. Bread using these methods is produced in just less than 4 hours. This is the most popular method used in the Philippines.

### **Salt delay method:**

The delayed salt method is very simple, when making dough simply reserve the salt in a separate container before adding it.

When you knead by hand, just bring the dough together. Don't work it much at all. Allow the dough to rest for up to an hour before adding the salt.







When using a mixer, you can bring the dough together, allow to rest for about half an hour and then add salt.

You will notice that the dough tightens up almost immediately after adding a salt you will also notice that between the time you left it and when the salt is added, there has been a significant change in the dough structure. It will become quite strong. With fine strands of gluten having formed, mix the salt into the dough until you cannot feel it in the dough. The dough will immediately develop sheets of gluten, it will be almost shiny.

#### **d) Ferment & dough process:**

This method is similar like straight dough method, first flying ferment is made and then dough is processed.

Ferment and dough process is followed during the cold climate, if more sugar and fat are in the recipe.

In this method first flying ferment is prepared with yeast, pinch of sugar, flour and required amount of water.

Then the mixture is left for five to ten minutes. Until air bubbles are formed. Flying ferment is made to check the quality of yeast and also activating the yeast cells by giving enough food (yeast food is sugar, moisture and warmth upto 28°C)

Once the flying ferment is ready, mix it along with other ingredients and prepare a dough.

Then follow the normal method of bread making using the flying ferment.

Breadmaking is an art and wonderful preparations can evolve in the process. It is a starch substitute instead of rice is used in other countries to make a wide variety of breads.

#### **Let us Revise :**

1. Sponge and dough process : Thus is divided into two halves and added to make sponge and dough.
2. Salt delayed method : Salt is incorporated during the knock back stage (punching)
3. Fermentation : Action of yeast when mixed to the dough it liberates carbondioxide :

- **Review Questions**

- (i) **Short Questions**

**Give short answer for the following :**

1. Explain the No time dough process.
2. Differentiate between sponge and dough method and ferment and dough method
3. Explain straight dough method.

- (ii) **Long Questions**

1. List the various methods of Breadmaking. Explain any two process.
2. Which method of Breadmaking is ideal according to you. Explain why?







# Cake Making

At the end of this unit the students will be able to :

1. Explain the functions of raw materials used in cake making
2. Explain the various methods of cake making

## I. Introduction:

Cake is often the dessert of choice for meals at ceremonial occasions, particularly Weddings, Anniversaries, and Birthdays. Cakes are broadly divided into several categories, based primarily on ingredients and cooking techniques. Yeast cakes are the oldest and very familiar to yeast breads.

Cheese cakes are in fact custard pies, with a filling made mostly of some form of cheese. Sponge cakes were first thought to be the first of non yeast based cakes and are primarily on trapped air as a protein maître to provide leavening with baking powder. Highly decorated sponge cakes with lavish toppings are some time called gateaux.

Butter cake including pound cake and devil's food cake rely on the combination of butter, flour, sugar, eggs and sometimes baking powder to provide both lift and moist texture.

## II. Functions And Quality Of Raw Materials Used In Cake Making:

### a) Cake flour:

Special cake flour with a high starch-to-gluten ratio is made from fine textured, soft, low protein wheat.

### b) Wheat:

It is strongly bleached and compared to all purpose flour, cake flour tends to result in cakes with a lighter, less dense texture. Therefore it is frequently specified or preferred in cakes meant to be soft, light or bright white such as angel food cake. However cake flour is generally not considered mandatory for good results

and its effects on the cakes texture can readily be simulated by adding corn starch or baking soda to all purpose flour.

**c) Sugar:**

Basically sugar produced from sugar cane and sugar beet. Ideal sugar for cake making fine granulated or castor sugar. There are many types of sugar available such as brown sugar (unrefined raw sugar) white sugar (cube sugar) icing sugar (finest powder used for cake decoration) golden syrup (amber colored syrup by product of sugar refining)

**d) Milk:**

Milk is available in fresh liquid milk, in concentrated form either sweetened or unsweetened or in the form of dried milk powder. Milk is a moistening agent containing about 88% of water. It is an enriching agent depending on the amount used. In nutrition, the protein and mineral contents of milk are also of great importance.

**e) Egg:**

Eggs are the second of the two structural materials used by the baker. When egg is added to flour mixture it changes the characteristics of the end product. It acts as a raising agent in cakes, apart from these qualities egg yolk is a good source of protein and also contains vitamins and iron.

**f) Fat:**

Unsalted butter or soft quality margarine is ideal for making good quality cake. Margarine originated as a butter substitute. These fats are the special fat qualities to the addition of emulsifying agents. Fat help to hold amount of liquid in the cake mix, they also increase the stability of the mix so that it does not collapse during baking. If butter is used in cake making should be free from rancidity and oiliness. In texture it should be firm and plastic and for the baker it should have good creaming properties retaining air after beating. Butter contains the vitamins A and D.

**g) Raising Agent:**

Baking powder baking soda is used as a raising agent in cake making. When butter contact with heat baking powder release carbondioxide gas thus helps to give lighter, soft and volume cake. Right proportion of baking powder should be used. Baking powder is most commonly used, a mixture of cream of tartar and soda. Always follow precisely the instructions about the quantity of the raising





agent to be used – too much can result in a cake that raises well at first and then collapses, giving a heavy texture and soapy taste.

#### h) **Vanilla Essence:**

It is a basic essence used as a flavoring agent. Vanilla beans are the dried pods of the vanilla plant. Choose one made from pure vanilla, with no synthetic ingredients to 2-5% of vanilla essence can be added to the cake mixture. Apart from vanilla essence other variety of essence also to be used accordingly.

#### i) **Fruit & Nuts:**

Good quality of fruits & nuts can be used in cake preparation. Make sure fruits & nuts are free from worms and insects. Use all dried fruits within three months of purchase. Dust fruits & nuts with flour and then mix it with cake batter to prevent sinking, addition of these ingredient not only adds taste to cake, it increases the nutritive value of cake.

### **III. CAKE MAKING METHOD**

There are certain mixing methods used in cake making. The type of fat used determines which method to be followed. These together directly affect the volume and texture of a cake.

#### **Various Method**

- Sugar batter method
- Flour batter method
- Blending method
- Whipping method

#### **Sugar Batter Method:**

To achieve best possible results a temperature of approximately 70°F should be aimed and the material used should be brought to this temperature prior to mixing.

1. In this method sieve flour with baking powder, milk powder if used in recipes. The fat is first beaten to a light foam with the sugar
2. Mix egg and essence together, add gradually to the creamed mixture beating continuously to prevent curdling.



3. Add flour and carefully mix it into the batter. The aim should be to get a clear smooth batter without bringing the aeration down.
4. Then the prepared batter is ready for baking at 350°F (180°C) for 20 min.

### Flour – Batter Method:

Basically this method is followed if the recipe has high percentage of egg, to prevent it from curdling. This method gives close texture and good quality cake

1. In this method sieve flour, baking powder together. Cream fat and flour until resembles creamy texture.
2. In a separate bowl beat egg, sugar and essence to a fully consistency.
3. Once both the mixtures are aerated, gently fold egg mixture into the creamed mixture.
4. If additional fruits and nuts are required, it can be added at this stage.

### BLENDING METHOD:

- In this method melted fat, water and oil are combined in a separate bowl combine the eggs, butter milk or milk and flour and sugar.
- Add flour leavening and other dry ingredient.
- At last fold all the ingredient together and mix for specified time.

### WHIPPING METHOD:

This method is followed if sponge contains no fat. These cakes are leavened primarily through the incorporation of air cells by addition of whipped eggs, whipping egg to the peak stage is quite important in this method.

This is done to dissolve the sugar and softened the egg allowing for quicker of volume. Add essence and gently fold it with sifted flour.





### Process :



### Equipments:



Cakes are attractive and increase the eye appeal of any buffet spread. Cakes are garnished with heartfelt Toppings and are prepared with excellent combination of ingredients and toppings.

#### Let us revise :

1. Cake flour : Special soft flour with less percentage of gluten which helps the Cake to remain soft.
2. Raising Agent : Baking powder incorporated to raise the cakes.
3. Sugar batter method : Sugar and butter creamed together to make the Cake.

### Give short answer for the following :-

1. Differentiate between sugar batter method and flour batter method.
2. Explain the Blending method of cake making.
3. Which method is ideal for Cake making?

### Explain in detail :

1. List the various methods of cakemaking and explain any two methods.
2. Explain the role of ingredients in cake making process.

