## CAKES

### 3.1 INTRODUCTION

What is the first thing you think of when you hear or talk about a birthday party? Yes, it is the cake! When you think of the taste it makes your mouths water and the colour and decoration make your eyes glitter.

However, there are also plain cakes, which are not decorated and not very colourful but they have their own importance. Think of a Christmas Cake with lots of dry fruits inside and a particular wine flavour. Such cakes also have a wonderful taste and have their own charm.

### 3.2 OBJECTIVES

After reading this lesson, you will be able to :

- list different types of cakes;
- demonstrate the method of preparation of different types of cakes;
- explain the uses of cakes during different meals;
- identify faults that can arise during preparation of cakes;
- suggest how such faults can be avoided.


### 3.3 CLASSIFICATION OF CAKES

Basically, cakes are made by creaming together fat and sugar, then adding eggs and flour, or by whisking eggs and sugar and then folding flour into them. Whenever a cake is decorated after baking, the outer layer or paste which is used for decoration is known is icing. Based on the type of cakes which are iced and which are not they may be classified into two types-
(i) Cakes without icing
(ii) Cakes with icing

## (i) Cakes without Icing

These are cakes with a rich texture, i.e. they contain higher percentage of fat or butter may contain dry fruits, fruits etc. These do not require any icing. They may be eaten directly or may be decorated
with other items like jam, icing sugar, desicated coconut etc. Such cakes are normally served during high tea or as independant snack item. They are generally not used as desserts. The following cakes will fall under this category:
(i) Butter Sponge
(ii) Caramel Cake
(iii) Madeira Cake
(iv) Victoria Sponge
(v) Swiss Roll
(ii) Cakes with Icing

The base for decorated cakes is a fatless sponge or genoese. It is very light fluffy in texture and after application of icing acquires the required richness.

The different types of icings used on the cakes have been discussed in a separate topic on Icings. The following cakes will fall under this category:
i) Cream and fruit cakes e.g pineapple cake
ii) Black forest cake
iii) Chocolate truffle cake
iv) Butter icing cake
v) Royal icing cake

### 3.4 GENERAL METHODS FOR MAKING CAKE

These vary according to the ingredients used in the recipe. The proportion of fat, sugar and eggs used in respect to the flour, and the method of incorporating them, affect the final product. There are four basic methods of preparing cakes. They are :

1) Rubbing-in-method
2) Creaming method
3) Whisking method
4) All in one method
(i) Rubbing in method

In this method, the fat is first cut with a knife into very small pieces. For this, the fat should be first chilled. After sieving, the flour is kept
in a thali. The fat is then added into the flour and rubbed with finger tips till all the fat is mixed into the flour and the mixture looks like bread crumbs. This method is used in recipes where the weight of the fat is not more than half that of the flour e.g. 100 of fat with 200 g flour or more.

## ii) Creaming method

In this method the fat should not be chilled but should be soft (not heated). The fat is first placed in a clean enamel bowl and mixed with a wooden spoon. Sugar is then added little at a time and the mixture is mixed with a wooden spoon regularly till all the sugar is utilized. The mixture becomes light and fluffy. This method is used for richer cakes including those where the weight of fat and flour are equal.

## iii) Whisking method

The eggs are shelled and kept in a clean bowl. Sugar and essence are then added into the eggs. The mixture is then whisked to form a thick foam. After that the flour is mixed into the mixture to form the batter. This should be baked immediately or the batter will sink.

## iv) All in one method

All the ingredients are placed together in a bowl, then beaten until the mixture is smooth and creamy. This method is used when you want a quick preparation.

## SOME TIPS

Before actually starting with the preparation of cakes it is very important to know some hints that will help you to make good cakes.

1. Check that all the needed ingredients and equipment are ready to hand.
2. Weigh and measure the ingredients carefully, prepare tins as required. The steps in preparing cake tins have been discussed separately.
3. Follow the recipe exactly.
4. When using creaming method, beat the fat by itself until it is soft, before adding sugar.
5. Use egg and fat at room temperature.
6. For one stage method, use all ingredients at room temperature.
7. Do not open the oven door unnecessarily. This will bring down the oven temperature.
8. Test the cake for readiness before taking it out from the oven. Cakes should be evenly browned and have come away from the sides of the tin slightly. If pressed from top, the mixture should spring back.
9. Allow the cake to cool slightly in the tin so that it can be tumed out without breaking.
10. Leave very rich cakes like wedding cakes to cool completely in the tin, otherwise they will break.

## Preparing tins for baking

There are four principal ways of preparing the inside of cake tins, and surface of baking sheets.

1. Baking sheets or trays as for swiss rolls and biscuits should be greased.
2. For rubbed in cakes, grease the tin and line the base with grease proof paper.
3. For creamed mixtures, line both the sides, and the base of the tins with grease proof paper.
4. For sponge cakes, brush the tin with fat, then coat it with equal quantities of flour and caster sugar sifted together.

## To line a tin-round or square

A square tin holds the same amount of mixture as a round tin about 2 cm larger in diameter. e.g. a recipe calling for 18 cm square tin can equally well be baked in a round 20 cm tin, provided the tins are of the same depth.


Measuring paper to fit the base of the tin

" Measuring a strip to fit the sides of the tin


Snipping along bottom edge of strip towards fold


Placing the strip in the tir.

1. Measure and cut a single or double piece of paper to fit the base of the tin. Ensure that it is not bigger than the base or it will spoil the shape of the cake.
2. Measure and cut a strip, long enough to line the sides of the tin. Make the strip 5 cm deeper than the height of the tin.
3. Make a 2 cm fold along the bottom of the strip and snip diagonally at 1 cm intervals up to the fold.
4. Grease the tin and place the strip round the sides of the tin with the cut edges lying flat against the base. Fit in the round. Grease the lined tin.

## INTEXT QUESTIONS 3.1

1. Fill in the blanks :
2. Cakes may be classified into $\qquad$ types, namely $\qquad$ and $\qquad$ .
3. Cakes without icing are generally eaten at $\qquad$ time as $\qquad$ .
4. Madeira cake is flavoured with $\qquad$ and
$\qquad$ .
5. Rich cakes are allowed to cool in the tin so they do not $\qquad$ -.

### 3.5 CAKES WITHOUT ICING

## A) BUTTER SPONGE

This cake is prepared by the creaming method. In all cakes prepared by this method proper creaming is of utmost importance as the rise in the volume of the cake is directly influenced by the amount of air incorporated at this stage.

To get some variety better taste you can add tutty fruity or raisins or walnuts dates to the basic mixture at the final stage of mixing.
All these cakes are eaten as snack items with tea or coffee.

## Let us bake a butter sponge

Ingredients :

1. Flour - $\quad 115 \mathrm{~g}$
2. Castor sugar - 115 g
3. Margerine $\quad-\quad 70 \mathrm{~g}$
4. Baking powder - $\quad 1 / 4$ tea spoon
5. Eggs - $\quad 5 \mathrm{ml}$.

## The method :

1. Sieve flour along with baking powder in a thali.
2. Cream fat and castor sugar in an enamel bowl with a wooden spoon, adding sugar little at a time, till all the sugar is consumed. Keep on creaming till the mixture becomes light, fluffy white in colour.
3. Beat eggs in a clean bowl with an egg beater after adding vanilla essence.
4. Mix the beaten eggs little at a time in the fat and sugar mixture and keep on mixing after every addition. Finish all the eggs.
5. Fold in the flour and baking powder in the mixture with a pallete knife till all the flour is properly mixed.
6. Mix milk or water in the end. The mixture should have dropping consistency-if lifted with a knife it should slowly drop down, in lumps and not pour like a liquid.
7. Place the mixture in a $1 / 2 \mathrm{~kg}$ prepared cake tin and level from top with a palette knife.
8. Bake in a preheated oven at $170^{\circ} \mathrm{C}$ for about 20 minutes, check for doneness as discussed earlier.
9. Remove from the oven and cool on a cooling rack.

## Try some Variations

(i) To get fruit cake, mix 50 g of tutty frutty in the mixture after mixing flour.
(ii) To get Queen cake, mix 50 g of chopped raisins.
(iii) To get date and walnut cake add 30 g of chopped dates and 30 g of chopped walnut.

## B) CARAMEL CAKE

Although this cake is similar to Butter Sponge, its method of preparation is somewhat different. More over, it is darker in colour and flavoured with caramel.

This cake is a good snack item and is appreciated with coffee. The flavour of caramel goes well with coffee. The method of preparing caramel is given along with the method of preparing this cake.

## To make caramel cake

Ingredients :

| Flour | -115 g |
| :--- | :--- |
| Baking powder | $-1 / 4$ tea spoon |
| Grain sugar | -85 g |
| Margerine | -70 g |
| Eggs | -2 |
| Milk | -2 tea spoon |
| Vanilla essence | $-1 / 4$ tea spoon |

## For Caramel

Grain sugar - 30g
Water - 1 tea spoon
The Method :

1. Seive flour and baking powder in a thali.
2. Cream fat and flour on a clean marble top with clean hands, till you get net formation/jalli in the mixture.
3. Beat eggs with grain sugar, along with vanilla essence.
4. Add beaten eggs in the mixture gradually, mixing all the time.
5. Caramelize 30 g of sugar with 1 teaspoon water in a small mould over fire. When it browns, remove. Allow to cool.
6. Add caramelized sugar and mix well. Add milk and mix again to get dropping consistency.
7. Pour the mixture in $1 / 2 \mathrm{~kg}$ prepared cake tin and bake at $170^{\circ} \mathrm{C}$ for about 20 minutes. Remove from the oven when cooked and allow to cool in the tin. Remove from the cake tin when cool.

## C) MADEIRA CAKE

Madeira is a wine. This cake has the sharp flavour of wine and a light taste of lemon: The cake is coloured light yellow (lemon colour) as this indicates the presence of lemon juice in the cake. This cake is
normally eaten along with tea or coffee. Since this cake is light and more spongy as compared to butter sponge, it can also be decorated with icing to make it look more attractive.

Ingredients :

Flour
Baking powder
Castor sugar
Margerine
rog

- 115 g

Eggs

- 115 g

Lemon juice/Rind
Red wine
Milk
Lemon essence
Yellow colour
Orange peel - 2 strips

## The Method :

1. Seive flour and baking powder in a thali.
2. Cream fat and sugar, adding sugar little at a time, till the mixture becomes light and fluffy.
3. Beat eggs along with lemon essence and yellow colour.
4. Mix the beaten egg with the fat and sugar mixture, mixing little at a time till all the egg is used up.
5. Add lemon juice, lemon rind and red wine, and mix.
6. Fold in the sieved flour with a palette knife. Add milk to get dropping consistency.
7. Pour the mixture in prepared and lined $1 / 2 \mathrm{~kg}$ bread mould and level from top.
8. Bake at $170^{\circ} \mathrm{C}$ for about 25 minutes.
9. Gamish the cake with strips of orange peel.
10. Demould and when cool, cut into slices and serve.

## D) VICTORIA CAKE

This is much simpler make as compared to other types of cakes. In this cake the flow., butter and sugar are in.equal propotion. Traditionally this cake is sandwiched together with jam and sprinkled
with icing sugar. The method of preparation is also very simple. All in one method (mentioned earlier) is used.

## Ingredients :

Flour
Soft Margerine - 225 g

Castor Sugar - 225g
Salt - 1 Pinch (1 gram)
Eggs - 4
Milk — 75 ml
Baking Powder - 1 tea spoon
Jam - 100g
Icing Sugar - 20g
The Method :

1) Sift the flour in a bowl and add all ingredients into it.
2) Beat for 1 minute in a food mixer at the highest speed.
3) Scrape round the edge of the bowl with a spatula and beat for further 2 minutes, again, at the highest speed.
4) Spoon out the mixture into 10 " diameter cake tin lined with brown paper.
5) Bake in a preheated oven at $170^{\circ} \mathrm{C}$ for 30 minutes.
6) Remove from oven and allow it to cool on a cooling rack.
7) Slice the cake horizontally from the centre and apply smooth jam on the lower half of the cake.
8) Cover the lower half again with the upper half and sprinkle icing sugar on the top (surface) to make various designs out of it.

## E. Swiss Roll

Swiss Roll is a snack item, but it is also used as a base to some of the well known dessert. As the name shows, it is a rolled up cake. The base is a fatless sponge prepared by beating eggs, sugar and vanilla essence till the mixture becomes very thick. The art lies in preparing the roll from the sponge baked. Let us now learn how to bake a good sponge and to prepare delicious Swiss rolls from it.


## Ingredients :

Flour - 115g
Eggs - 4
Baking Powder - $1 / 2$ tea spoon
Grain Sugar $\quad-115 \mathrm{~g}$
Vanilla essence - $1 / 2$ tea spoon
Jam $\quad-50 \mathrm{~g}$
Method :

1. In a clean bowl beat eggs, vanilla essence and 110 g of grain sugar till it becomes thick and frothy. This will take you approximately 15 to 20 minutes to do.
2. Sift flour with baking powder and slowly mix into the mixture with a palette knife. Do you remember what a palette knife looks like?
3. Prepare a swiss roll tray by lining it with brown paper (as you do for cake tins) and bake the mixture for about 12 minutes in a preheated oven at $190^{\circ} \mathrm{C}$. It will tum golden brown from top.
4. In the mean time, cut a butter paper slightly bigger than the swiss roll tray ( $2^{\prime \prime}$ bigger from each side) and sprinkle the remaining 5 gms of sugar evenly over it. Melt the jam and cream. This should be done while the sponge is in the oven.
5. When the sponge is cooked, place it upside down over the butter paper and quickly apply 50 gms of jam over it.
6. While still hot, roll up the sponge, leaving the butter paper down.
7. After rolling up, wrap the roll in the same butter paper. When you want to ușe it remove the butter paper and cut into slices.

### 3.5 FAULTS AND REMEDIES IN CAKE BAKING

When you first start baking cakes, you may end up with a cake which has burst at the top or one which is well done at the top but half done undemeath. In order to avoid such faults, you must know the cause behind them. Only then can you remedy the faults. In order to bake a perfect faultless cake, let us learn the faults that can arise.

Cake faults are broadly divided into :

1. Shape faults
2. Structural faults
3. Texture faults
4. Crust faults
5. Colour faults
6. Miscellaneous faults

## 1. Shape Faults

A) Collapsed cake with white spot on the surface.

Causes
i) Too much Sugar
ii) Too little liquid

Effects \& Remedies
This leaves sugar particles, as white spots on surface. To avoid this, formula must be balanced and sugar correctly weighed.

Less liquid can cause this fault. The cake mixture should have dropping consistency. Add milk or water to get this consistency.

## B. Baked with peeled top

## Causes

(i) Insufficient mixing
(ii) To a much heat from top

Effects \& Remedies
This is due to over or under mixing of the mixture. Over mixing causes air to escape, while under mixing leaves no space for air to expand. Hence mixing should be proper.
Too much heat will expand cake fast and set it early. The top crust will burst due to quick expansion. Since the oven has two heating elements, one below and one on top, the best remedy would be to switch off the top element. Otherwise the cake tin can be covered from top when there is only one heater.

## C. Cake with flat top

Causes
i) Oven too cool
II) Incorrect balance between fat and egg

## Effects \& Remedies

This gives a slower and more even expansion in the oven, yielding a flat top. Hence use correct baking temperature as mentioned in the recipe.
If the proportion of fat is high, the egg will not be able to support it and the result will be a flat surface. To avoid it, follow the recipe correctly.

## 2. STRUCTURAL FAULTS

## A. Under baked area under top crust

## Causes

## Effect \& Remedies

i) Under baking
ii) Bumping the cake during baking

The area under the crust will have higher moisture content resulting in damp unbaked surface. If the top crust is highly coloured and the area under the crust contains moisture, reduce the temperature and the baking time.

If the cake is shaken before setting, some of the cells in the middle will collapse resulting in damp, apparently unbaked area. Hence, do not disturb the cake in the oven before it is baked.

## 3. TEXTURE FAULTS

## Causes

## Effects \& Remedies

i) Less baking powder
ii) Too much liquid This will close the cake and the cake will lack lightness.
iii) Too little sugar This will allow the cake to set too early and give less time to expand.

## 4. CRUST FAULTS

## A. Cracks on the surface of the cake

Causes
i) Too hot oven
ii) Too little sugar

Effect \& Remedies
Due to excess heat the surface gets sealed and hard. Due to pressure from below the surface cracks during baking. This can be avoided by lowering the temperature of the oven by reducing heat and opening the oven door.
Sugar plays an important part in cake making. Hence measure it correctly. Too little sugar will allow the cake to set too early and as a result the surface of the cake will crack.
ii) Over filling the tin with cake batter

## 5. COLOUR FAULTS

## Causes

A. Discoloured crumb
i) Too much bottom heat
ii) Too much baking powder
B. White spots on the surface of the cake
i) Batter standing The moisture from the surface before too long
ii) The use of very large grains

## Effects \& Remedies

The base is over baked and this causes discolouration. Regulate the bottom heat if the oven is too hot.

Too much baking powder causes dehydration of sugar which causes it to caramelise. Hence measure baking powder correctly.
The batter reaches the top of the tin too quickly and crust will form before expansion is complete. This will make the crust crack. Try to line the tin 2" above the size of the cake to allow full expansion of cake batter. baking of the batter will evaperate leaving the sugar in a dry state. When baked in this condition, white spots are formed on the surface of the cake.

In case immediate baking is not possible, keep the cake batter in the cake tin covered so that the moisture from top does not evaporate.

If sugar crystals are too large they dissolve slowly: Hence when the cake is fully baked the sugar crystals do not get dissolved leaving white spots.

Remedy: Use fine sugar.

## 6. MISCELLANEOUS FAULTS

## Mould growth

Causes

1. Excessive moisture

Effects \& Remedies
Moulds require moist conditions in which to grow. If the outer surface of the cake becomes very moist it will cause mould
formation. Do not wrap the cake when it is hot, but allow it to come to room temperature before wrapping.

## INTEXT QUESTIONS 3.2

1. Butter sponge cake is prepared by $\qquad$ method, creaming fat along with $\qquad$ .
2. In caramel cake fat is creamed along with $\qquad$ .
3. In Victoria cake equal qualities of $\qquad$ and
$\qquad$ are used.
4. Swiss Roll is a $\qquad$ cake (give the shape)
5. Answer the following questions :
i) Why is creaming important in a butter sponge? To what extent should it be done?
ii) Why can you use grain sugar in caramel cake instead of castor sugar?
iii) Which are the different shapes in which you can prepare Madeira cake?
iv) Which method of preparation is used in preparing Victoria cake?

### 3.6 DECORATED CAKES

Fatless sponge cake is the base of all decorated cakes. This sponge is baked in the cake tin of the desired shape and size and then decorated with the required type of icing to get the following types of cakes.

## 1. Cream and Fruit Cake

For example, pineapple cake. Here the fatlerss sponge cake is decorated with cream icing (discussed in a separate topic on icings), and then decorated with fresh or tinned fruits, e.g., pineapple.

## 2. Black Forest Cake

Fatless chocolate sponge is decorated with cream icing and covered with flakes of chocolate on top. Cherries are used here for decoration.

## 3. Chocolate Truffle cake

Fatless chocolate sponge is decorated with cream and chocolate cooked together till the chocolate melts and poured over the cake till the icing sets. (Discussed in the topic on icing).

## 4. Butter icing cake

Fatless sponge cake is decorated with different coloured butter icing (discussed on the topic on icing).

## 5. Royal icing cake

Fatless sponge cakes are decoratoed with marzipan and Royal icing (discussed in the topic on icings).

## A. Fatless Sponge

## Ingredients :

1. Flour

- 60g

2. Grain Sugar

- 60g

3. Eggs

- 3

4. Vanilla essence

- $1 / 2$ tea spoon


## Method :

(1) In a clean bowl, free from fat and moisture, beat eggs, sugar and vanilla essence with a clean egg beater.
(2) Keep on beating (for about 20 minutes) till the mixture becomes thick and foamy.
(3) Slowly mix in the sifted flour, little at a time and mix with a palette knife. Do not over mix otherwise the batter will sink.
(4) Bake in a prepared $1 / 2 \mathrm{Kg}$ tin at $150^{\circ} \mathrm{C}$ for about 20 minutes. Do not move the cake tin in between when the cake is in the oven, or the sponge will sink.
(5) Remove and cool on a cooling rack.
B. Fatless Chocolate Cake

Ingredients :

1. Flour $\quad-\quad 50 \mathrm{~g}$ Sieve \& Mix.
2. Cocoapowder

- 10 g

3. Eggs

- 3

4. Vanilla essence

- $1 / 2$ tea spoon

5. Grain sugar

- 60 g


## Method:

This cake is made in the same way as a fatless sponge cake.

## INTEXT QUESTIONS 3.3

1. List out the different decorated cakes.
2. Give the recipe for preparing fatless sponge cake.
3. How is chocolate fatless sponge different from fatless sponge cake?

### 3.7 ANSWERS TO INTEXT QUESTIONS

3.1 1. 2, cakes without icing and cake with icing
2. tea time, independent snack
3. wine and lemon juce
4. break.
3.2 1. creaming; sugar
2. flour
3. flour, butter, sugar
4. rolled up
5. refer text.
3.3 1. refer text.
2. refer text.
3. refer text.

