



Sweet and Savoury Biscuits

Context: Special Dietary Needs

Functions of Ingredients in Biscuits

The main ingredients used in making **sweet** biscuits are **fat, sugar and flour**.

Savoury biscuits will not have the sugar in them.

All ingredients need to be measured accurately.

Each ingredient has a specific function in the recipe.

Additional ingredients e.g. flavourings, essences, chocolate, coffee, spices, dried fruit and vegetables, nuts, seeds, cheese etc may be added.

FLOUR

FUNCTION OF FLOUR IN BISCUITS

- Main bulk to the biscuits.
- The gluten in the flour forms the main structure by trapping air and setting when heated.



PLAIN FLOUR

Soft plain flour with a lower gluten content produces a soft, crumbly and even texture to the biscuits. The grains are processed then treated with chlorine to make the flour whiter.

SELF RAISING FLOUR

This flour contains raising agents that make biscuits spread and rise so resulting in a lighter texture. You can substitute plain flour and add baking powder.



WHOLEMEAL FLOUR

Also known as **whole-wheat** flour.

- This is milled from the entire wheat kernel and contains all the nutrients and flavour of the wheat.
- It is courser than white flour giving a heavier result.
- It absorbs more liquid than white flour so recipes should be adjusted if this type of flour is used.
- **Brown flour (wheat-meal)** contains only 80-90% of the bran and wheat germ and has a finer texture and milder taste.



NON-WHEAT FLOUR

These can be used for biscuit making, although some should be combined with wheat flour.

Potato flour:

This fine powder is made from potato starch and can be mixed with wheat flour to give a lighter texture to cookies.

Chestnut flour:

This light brown, nutty flavoured flour is made from ground chestnuts and is often sold in Italian delicatessens.

Cornmeal:

This is also known as polenta or maize-meal. This is bright yellow and coarse or medium ground.

Cornflour/cornstarch

This fine white powder is made from the middle of the maize kernel. It is often used in piped cookie mixtures to give a smooth texture. It is virtually gluten free.

Soya flour;

This flour is made from soya beans. It has a distinctive nutty flavour. It has a high protein content. Medium- and low-fat varieties are available.



Rice flour:

This is made by finely grinding polished white rice and is used in many cookie recipes, to give a short, slightly crumbly texture.



GLUTEN-FREE BAKING

Some people are **allergic or intolerant** to the **protein gluten**, which is **found in both wheat and rye**. Specially produced gluten-free and wheat-free flour mixtures can be used for baking, as can any of the naturally gluten-free flours such as cornmeal, potato flour, rice flour and soya flour.





RAISING AGENTS



- Although biscuits are usually made with plain flour; raising agents may be added to give them a lighter texture.
- Raising agents make biscuits spread more, so they will need to be spaced well apart for baking.
- Raising agents react when they come in contact with water and produce carbon dioxide bubbles that make the cookie rise during baking.
- Biscuit dough containing raising agents must therefore be shaped and baked as soon as liquid is added.
- Store raising agents In a dry place and use within their use- by date because they deteriorate with age, becoming less effective.

Baking Powder

This is a mixture of alkaline bicarbonate of soda and an acid such as Cream of Tartar



Bicarbonate of Soda

This can be added to a biscuit recipe that contains an acidic ingredient.



FAT - usually butter or margarine

FUNCTIONS OF FAT IN BISCUITS

- Gives biscuits their golden colour.
- Gives biscuits their rich flavour. Butter gives a richer flavour
- Butter and soft margarine creams easily with the sugar.
- Entangles and holds air bubbles in the mixture as creamed with sugar.
- Adds shortness to a biscuit dough in the rubbing in method
- Gives a soft even texture with the creaming method.
- Helps keep food products moist and extend the biscuits shelf life.



BUTTER

- Unsalted (sweet) butter is best for making biscuits; it has a sweet, slightly nutty taste and a firm texture, which is particularly good for biscuits made using the rubbing-in method.
- The temperature of butter is important. For rubbed-In biscuits butter should be cold and firm but not too hard; take it out of the refrigerator 5 minutes before using.
- To cream butter. it should be at room temperature. This is very important if you are creaming by hand.



OTHER FATS

Margarine:

This won't produce the same flavour as butter but it is usually less expensive and can be used in the same way. Block margarines are better for biscuit making, although soft tub margarine may be used for creaming.

White cooking fats:

These are made from blended vegetable oils or a mixture of vegetable and animal or fish oils.

White fats are flavourless and create light, short-textured cookies. They work well in highly flavoured cookies, in which you wouldn't taste the butter.

Lard is an opaque white fat made from rendered pork fat and features in some traditional biscuit recipes.

Oil:

This may sometimes be used instead of solid fat. Sunflower and safflower oils are preferable as they are light in colour with a mild taste. Olive oil has a distinctive flavour but may be added to savoury biscuits like crackers.



EGGS

FUNCTIONS OF EGGS IN BISCUITS

- Eggs are used to enrich biscuit dough and bind dry ingredients together.
- They are often included in a rolled dough because they prevent the mixture from spreading too much during baking.
- If a recipe does not specify the size of an egg, use a medium one.
- When used in baking eggs should be at room temperature; cold egg yolks may curdle and cold egg whites will produce less volume when whisked.
- Add eggs to a creamed mixture a little at a time, beating after each addition.
- Whisk egg whites In a very clean bowl and use straight away.

BUYING AND STORING EGGS

- Always check the use-by date on eggs and never buy cracked, damaged or dirty eggs.
- A fresh egg will have a round, plump yolk and a thick white that clings closely to the yolk.
- Store eggs In the refrigerator pointed-end down.
- Do not store near strong-smelling foods or possible contaminants such as raw meat; their shells are porous and can absorb odours and bacteria.



SUGAR

FUNCTIONS OF SUGAR IN BISCUITS:

- Sweetens flavour of biscuit mixture
- Caster sugar's smaller granules dissolve quicker
- Helps brown the outside layer as it caramelises
- Increases bulk of mixture.
- When creamed with fat, sugar helps to hold air, acts as a raising agent which is useful more in cake making than biscuit making

There are many different types of Sugar all of which add their own distinctive character to cookies.

REFINED SUGARS

This is produced from sugar cane and sugar beet. Refined white sugar is 99% pure sucrose.

Granulated sugar:

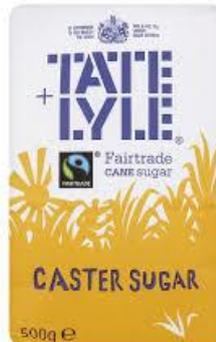
This has large granules and can be used in rubbed-In mixtures or to make a crunchier biscuit topping.



Caster sugar:

This is the most frequently used sugar for biscuit making. It has a fine grain so Ideal for creaming with the butter.

It is also used for melted mixtures, and sprinkling over freshly baked cookies



Icing sugar:

The fine, powdery sugar is used to make smooth icings and fillings and for dusting biscuits. It may also be added to some piped mixtures



Soft brown sugar:

This is refined white sugar that has been tossed in molasses or syrup to colour and flavour it. The darker the colour the more intense the flavour. It makes moister biscuits than white sugar. so one type should not be substituted for the other.



wiseGEEK

UNREFINED SUGARS

Derived from raw sugar cane, these retain some molasses. They often have a more intense flavour but tend to be less sweet than refined sugars.

Golden caster sugar and granulated sugar

These are pale gold and are used in the same way as



Demerara sugar

This rich golden sugar has a slight toffee flavour. The grains are large so it is only used in biscuit dough if a crunchy texture is required. It is good for sprinkling over biscuits before they are baked.



Muscovado sugar This fine-textured, moist soft brown sugar may have a treacle flavour



OTHER TYPES OF SWEENTENING FOR BISCUITS

There are many other ingredients that can be used as sweeteners.

Golden syrup:

Slightly less sweet than sugar. this produces moist, sticky biscuits and is often used in no-bake recipes.

Maple syrup:

Thinner than golden syrup, this has a distinctive flavour. **Honey:**

Use blended honey in biscuit dough as the flavour of milder honeys will be lost.

Malt extract:

This concentrated extract made from barley has a distinctive flavour. It has a thick consistency and dark, almost black colour.

Molasses:

A by-product of sugar refining, molasses looks like malt extract but has a slightly bitter taste.

LOW / NO CALORIE SWEETENERS

- Using products like SPLENDA® No Calorie Sweetener instead of sugar is a good option when calories need to be reduced e.g. in **slimming diets**, or for people with **diabetes** where sugar intake is very restricted.
- Sweeteners like this have the sweet taste, without all of the calories and carbohydrates of sugar.
- Sucralose, the sweetening ingredient in sweeteners like this is not recognised by the body or broken down for energy, so it has no effect on insulin or blood glucose levels.
- People with **diabetes** can therefore use a certain amount of this form of sweetener without putting their health at risk.



CHOCOLATE CHIP BISCUITS USING SWEETENER INSTEAD OF SUGAR

Serves: 12-14

Preparation Time: 15 mins

Cooking Time: 18 mins

Ingredients:

100g olive spread

6tbsp SPLENDA® (or similar granulated sweetener)

1 large egg

1 tsp vanilla extract

100g self raising flour

50g plain flour

25g oats

30g dark chocolate, chopped

5 tbsp skimmed milk

Method

1. Preheat the oven to 180° C

2. Line 2 large baking sheets with parchment paper.

3. Cream together the margarine and SPLENDA® until smooth.

4. Beat in the egg and vanilla.

5. Add the plain and self raising flour to the bowl along with the oats and press the mixture together until it starts to clump. Tip in the chocolate and add the milk and mix everything well to form a thick paste like batter.

6. Spoon heaped dessert spoonfuls on to the parchment then spread carefully to about 9cm diameter.

7. Bake for 17 - 18 minutes until golden.



Methods of Making Biscuits

There are many different ways of making biscuit dough. Depending on the type of biscuit, the method will vary, so it is useful to know all the techniques.

These methods are the ways of combining and mixing ingredients just like in cakes but the proportions and ratio of ingredients are different

1. Melting Method
2. Rubbing in Method
3. Creaming Method.
4. Whisking Method
5. All-in-one Method

Biscuits need to be shaped. This is usually done before baking by:

Using cutters, piping the mixture, putting spoonfuls on the baking tray

THE CREAMING METHOD

- A wide variety of biscuits are made using the creaming method. The fat and sugar are creamed together, until they are well aerated and have a light, fluffy texture.
- Eggs and dry ingredients are then added a little bit at a time. The flour is folded in.
- The fat should be soft enough to beat easily, so remove it from the refrigerator at least 30 minutes before you start mixing.
- Unsalted (sweet) butter is the best choice, but if you are ongoing to use margarine, use the firm block type rather than softer margarine that is sold in tubs.
- The mixture can be rolled or dropped in spoonfuls onto a baking tray.
- These biscuits have a longer shelf life due to the ratio of fat

- The eggs should also be at room temperature or they may curdle the creamed mixture when they are added. It is not essential to use an electric mixer or food processor for the creaming method - a wooden spoon works well but it definitely makes the process easier and quicker.

Top Tip:

Creamed mixtures have a tendency to curdle when the eggs are added. To avoid this, add the eggs a little at a time and beat well after each addition. If the mixture does curdle, beat in 15ml / 1tbsp of the flour before adding more egg.



Examples of biscuits made by the CREAMING METHOD



Biscuits using the CREAMING METHOD.

Ingredients

100g butter
100g soft dark sugar
1 tbsp golden syrup
150g Self raising flour
1 tube of smarties



Method

Pre-heat oven to 180° C

Beat butter and sugar together in a bowl until creamy.

Beat in the syrup.

Work in half the flour, stir in the Smarties, add remaining flour and bring the dough together with your fingers. Divide into 14 balls.

Place well apart on a baking sheet, do not flatten them.

Bake for 12 minutes until pale golden on the edges. Cool on a wire rack.

THE RUBBING-IN METHOD

- With this method the fat is rubbed into the flour.
- The fat has a shortening effect like in pastry. The fat coats the flour particles and this prevents the absorption of water, giving a waterproof coating.
- This prevents the gluten from developing which can give mixture an elastic and stretchy texture. If gluten cannot form, the mixture is shortened giving a characteristic short, melt in the mouth and crumbly texture
- Many traditional biscuits such as shortbread are made with this method.
- The fat which can be butter, margarine, white vegetable fat or lard, should be firm and cool but not straight from the refrigerator.
- Beaten eggs, milk or water may be added to bind the mixture.



Examples of biscuits made by the RUBBING IN METHOD



**Biscuits made by the rubbing
in mixture are usually rolled
and cut into shapes**

MELTING METHOD

- This method involves the fat being melted and then the dry ingredients added.
- Examples are gingerbread shapes / ginger nuts, flapjacks, brandy snaps and florentines.
- These biscuits require the butter and sugar or syrup to be melted together first to start the caramelization process prior to baking.
- These biscuits have a longer shelf life and the flavour develops during keeping.
- They are often thin crisp biscuits.
- These biscuits usually contain little flour which helps spread on the baking sheet. They need plenty of room on the baking tray.



Examples of biscuits made by the MELTING METHOD



THE WHISKING METHOD

- This method usually begins with the eggs and sugar being whisked together then the dry ingredients being folded in. This usually results in a delicate crispy wafer like biscuit.
- Airy cookies or crisp, delicate biscuits, such as tuiles, fortune cookies, macaroons and *langue de chat* are made by folding the dry ingredients into a whisked mixture of eggs and sugar; or into a meringue (whisked egg whites and sugar) mixture.

Examples of biscuits made by the MELTING METHOD



THE ALL-IN-ONE METHOD

- Some cookies are made by simply placing all the ingredients in a bowl and beating them together.
- This easy method can be made even faster by using a food processor, although chunky ingredients such as dried fruit and nuts may have to be stirred in after mixing the biscuit dough.
- It is essential that the fat is soft enough to blend easily.

DECORATING COOKIES BEFORE BAKING

Techniques for decorating unbaked cookies can range from the most simple sprinkling of sugar or nuts to brushing with a glossy glaze or painting intricate designs with edible food colouring.

SUGAR

- A crunchy sugar topping is one of the easiest and most effective ways to decorate unbaked cookies.
- It is also one of the most popular decorations for baked biscuits. Many different sugars can be used.
- Caster sugar can be sprinkled straight over uncooked biscuitsto give a subtle, crunchy texture.
- Coarse sugars such as demerara sugar give a crunchier result.

NUTS

- Chopped and flaked nuts can be sprinkled over biscuits in the same way as sugar. Nuts brown during baking, so avoid using on biscuits that are baked at a high temperature or on biscuits that are baked for a long time as the nuts may overcook.
- A whole nut can be pressed into the top of each individual biscuit.
- The nuts may be decorative, or they can be used to indicate the type of cookie. For example, you might want to press a whole hazelnut into a hazelnut biscuit, or an almond into an almond flavoured biscuit.



GLAZES



- Brushing a glaze over biscuits can provide a sticky surface that nuts or sugar can stick to, or simply to give an attractive finish.
- To give biscuits a rich, glossy finish, use a whole beaten egg or yolk. Brush the glaze lightly and evenly on the top.
- The glaze can be diluted by adding 1 tbsp cold water or milk and adding a pinch of caster sugar for sweet biscuits; salt for savoury ones.
- Lightly beaten egg white produces a clear, shiny finish. Brush over the biscuits halfway through the baking time, so that it soaks into the cookies slightly and does not set to a crackled glaze. It looks effective sprinkled with a little sugar.

CANDY CENTRES

This technique is very simple to do and is very effective. Cut out the centre of each cookie and fill it with crushed boiled sweets. The sweets will melt during baking, then harden when cooled to make a colourful centre.

SIMPLE WAYS TO DECORATE COOKIES BEFORE BAKING

- Chopped fudge, toffee and chocolate chunks and chips add a decorative finish to biscuits.
- Candy coated chocolate buttons like smarties retain their bright colours when baked in cookies and are especially popular with young children. Mix into the dough or gently press them into the surface of the cookies.
- Halved or sliced glace cherries and candied fruit are effective and colourful decorations.



DECORATIONS FOR BAKED BISCUITS

As with unbaked biscuits, you can make biscuits more interesting with simple decorating techniques.

Decorating biscuits with sugar

Different types of sugar can be used to give a range of effects on various baked biscuits.

Icing sugar

- A light dusting of icing sugar gives plain biscuits a professional finish and is a useful way of disguising any imperfections.
- Use a fine sieve or sugar dredger to give an even coating. Stencils can also be used.

Caster sugar

- Simply sprinkling freshly baked biscuits with a little caster sugar is perhaps one of the quickest and easiest decorations to use.
- Sprinkle sugar over the cookies while they are still warm so that the sugar sticks to them.

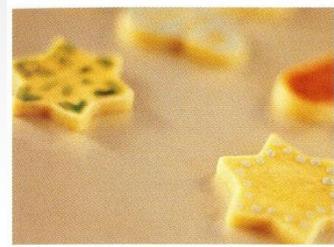


Coarse-grained sugars Granulated and demerara sugar look pretty sprinkled over biscuits but, because the grains are so large, they will not stick to the biscuits on their own. The easiest way to overcome this problem is to use a glaze such as beaten egg white to stick the sugar to the biscuits then return the biscuits to the oven for 2-3 minutes.



FOOD-COLOURING PENS

- These pens look like felt-tipped pens but they are filled with edible food colouring. They come in a range of colours from primary to pastels and some are flavoured.
- They can be used directly on to biscuits or on to icing. They are most effective used on rolled and cut cookies that have been baked only until light golden rather than well browned; Icing must be dry and firm.
- Use the decorating pens in the same way as an ordinary pen. Draw designs, write messages, or use to colour in shapes.



DECORATING BISCUITS WITH ICING

Biscuits can look attractive when decorated with coloured icing.

There are many different types of icing that can be used to decorate biscuits. **Glace icing** give a smooth, glossy finish and can be used to create simple finishing touches to the biscuits, while **royal icing** can be swirled to give a textured pattern or piped into delicate and intricate designs.

Glace Icing

This is the simplest type of icing to make and use. It is perfect for the tops of biscuits, or for drizzling and piping simple designs.



Feathered glaze icing

Spoon a little icing over a cookie to cover it completely, then pipe several thin, straight parallel lines of icing in a contrasting colour across the top of the biscuit. Starting at the middle of the cookie, draw a wooden cocktail stick or fine skewer through the lines in the opposite direction, gently dragging the colour through the icing and creating a feathered effect on the biscuit.



Cobweb icing

Cover a biscuit in icing, then pipe on fine, concentric circles of icing in a contrasting colour. Starting from the centre and working outwards.

Draw a cocktail stick from the centre of the cookie to the outside edge, dividing the biscuit into quarters, then repeat to divide it into eighths.



ROYAL ICING

This icing sets hard to give a good finish so is perfect for piping designs and messages on cookies such as gingerbread. It can be coloured with a few drops of food colouring but is better left unflavoured.

To cover 30 biscuits:

1 egg white, at room temperature
225g sieved icing sugar



Method

Beat the egg white for a few seconds with a fork. Mix in the icing sugar a little at a time until the mixture stands in soft peaks and is thick enough to spread. If the icing is for piping, beat in a little more icing sugar until the icing will stand in stiff peaks. Spread or pipe the icing over the biscuits. Leave to set

DECORATING BISCUITS WITH CHOCOLATE

The taste, texture and versatility of chocolate makes it one of the most popular ingredients for decorating biscuits. It can be used to coat biscuits, pipe or drizzle patterns, or even write short messages,

MELTING CHOCOLATE

For most decorating techniques, chocolate needs to be melted. Take care doing this as overheating will spoil both the texture and flavour of the chocolate.

When melting chocolate, choose a variety with a high proportion of cocoa butter as this will melt much more easily and smoothly.



USING MELTED CHOCOLATE

- When you are decorating biscuits with melted chocolate, handle the chocolate as little as possible and use a palette knife or metal spatula to lift and move the decorated biscuits around; the warmth of your fingers will leave prints on the chocolate and make the surface dull.
- Always leave chocolate-coated biscuits to set at room temperature and do not store in the refrigerator unless it is exceptionally warm. Chilling will cause the chocolate to lose its glossy appearance.



BISCUIT FILLINGS

From smooth custard creams to sticky jam sweethearts, two biscuits sandwiched together are better than one. The key to a good cookie filling is to make the mixture soft enough to spread or pipe but not too moist because this can make the biscuits soft and crumbly.

BUTTERCREAM

This simple cookie filling is very easy to make. Once filled, the biscuits should be eaten within 3 days.

- To make enough filling for about 12 pairs of average-size cookies, put 50g softened unsalted butter in a bowl and beat with a wooden spoon until very soft, smooth and creamy.
- Gradually stir in 90g of icing sugar and 1 tsp of vanilla essence. Beat the ingredients well with an electric mixer until they are very light and smooth.

Other filling suggestions include:

Flavoured buttercreams, chocolate ganache, crème au beurre, jam, chocolate and whipped thick cream.



Savoury Biscuits

Savoury biscuits can be decorated with ingredients such as:

- Grated cheese.
- Poppy seeds
- Pumpkin seeds
- Sesame seeds
- Glazed with beaten egg
- Grains
- Vegetable slices etc



WHAT WENT WRONG AND WHY

Sometimes biscuits don't turn out quite as you had hoped. If you have a problem when baking, try to work out why so that you can either remedy it at the time, or at least avoid it next time you bake biscuits.

<u>Problem</u>	<u>Cause</u>	<u>Remedy</u>
The dough is very soft and won't hold its shape	Too much liquid or fat or too little flour or the dough has become too warm.	Always measure ingredients carefully Chill the dough for 30 minutes before baking. If it is still too soft, work in a little extra flour:
The dough is dry and crumbly and won't hold together.	Not enough liquid or fat or too much flour, or the dough may not have been kneaded sufficiently.	Always measure ingredients carefully . Chill the dough for 30 minutes before baking. If it is still too soft, work in a little extra flour:
The biscuits are not evenly cooked.	The cookies are either of uneven sizes on the baking sheet: or some cookies were placed too near the edge of the sheet.	Make sure that all the biscuits on a baking tray are an even size. Leave at least a 2. 5cm gap around the edge of the baking sheet and turn the trays around half way through baking,
The biscuits crumble when removed from the baking tray.	Cookies that have a very high butter content are often more fragile than less rich ones.	Leave fragile cookies to cool on the baking sheet for at least 3 minutes before transferring to a wire rack.

<u>Problem</u>	<u>Cause</u>	<u>Remedy</u>
The biscuits stick to the baking tray	The baking sheet was not greased or greased unevenly. Alternatively, it may have been greased with salted butter.	Use melted, unsalted (sweet) butter or oil for greasing or line the sheet with baking parchment.
The biscuits are dry and too crisp on top	The oven was too hot or the biscuits were baked too long	If you have concerns about the temperature of your oven, use an oven thermometer; Check biscuits a few minutes before end of cooking time
The biscuit has spread out too much on the baking tray	The biscuits were not chilled before baking or the baking sheet was over-greased when the biscuits were added. Too much fat has been used. Too much sugar or liquid has been used. Oven too cool.	Most biscuits benefit from chilling before baking. Grease baking sheets only lightly. Always use cold baking trays. Measure all ingredients with care.
The biscuits are burnt on the base but not cooked on the top	There are a number of possible causes: baking too low down in the oven, or at too low a temperature; the baking trays may be poor quality or you may have used salted butter for greasing.	Check the oven temperature and bake biscuits on the middle shelf. Avoid thin or very dark baking sheets. Butter burns at a lower temperature. so use oil for cookies baked at high temperatures or for a long time.



