



# Autumn Apple Cake



Autumn Apple Cake is a favourite in our house. The ingredients are:

75 grams margarine (at room temperature)	2 large eggs, beaten
150 grams soft brown sugar	a little milk
100 grams plain white flour	2 level teaspoons baking powder
150 grams wholemeal flour	1 tablespoon chopped mixed peel
½ teaspoon mixed spice	grated rind of 1 orange
½ teaspoon ground cinnamon	3 cooking apples

What is the ratio of margarine to plain white flour?

What is the ratio of margarine to wholemeal flour?

What is the ratio of plain white flour to wholemeal flour?

What is the ratio of sugar to flour?

You have a 250 gram pack of margarine. How many cakes of this size could you make?

You have a 750 gram bag of wholemeal flour. How many cakes could you make?  
How much plain flour would you need to make the same number of cakes?

Use an online supermarket website to find the prices of the main ingredients (margarine, sugar, flour and eggs). Write the prices below.

Margarine  
Soft brown sugar  
Plain white flour  
Wholemeal flour  
Eggs

Round the prices to the nearest 10p and estimate the total cost of the ingredients, then work out the actual cost.

You cut the cake into 12 slices. How much does each slice cost?

You make 5 cakes for a coffee morning. You sell each slice for 50p more than it cost you to make. How much profit do you make?



# Autumn Apple Cake



Autumn Apple Cake is a favourite in our house. The ingredients are:

- |  |                                    |
|--|------------------------------------|
| 3 ounces margarine (at room temperature) | 2 large eggs, beaten               |
| 6 ounces soft brown sugar                | a little milk                      |
| 4 ounces plain white flour               | 2 level teaspoons baking powder    |
| 6 ounces wholemeal flour                 | 1 tablespoon chopped mixed peel    |
| ½ teaspoon mixed spice                   | grated rind of 1 orange            |
| ½ teaspoon ground cinnamon               | 3 cooking apples (about 20 ounces) |

Use the following approximate conversions to rewrite the recipe in metric quantities:

1 ounce = 25 grams    1 teaspoon = 5 grams    1 tablespoon = 3 teaspoons

- |   |                              |
|---|------------------------------|
| ___ grams margarine (at room temperature) | 2 large eggs, beaten         |
| ___ grams soft brown sugar                | a little milk                |
| ___ grams plain white flour               | ___ grams baking powder      |
| ___ grams wholemeal flour                 | ___ grams chopped mixed peel |
| ___ grams mixed spice                     | grated rind of 1 orange      |
| ___ grams ground cinnamon                 | ___ grams cooking apples     |

The cake is cooked at Gas Mark 4 or 350°F.

Use the formulae  $C = (F - 32) \times \frac{5}{9}$  to convert 350°F to °C (to the nearest 10°).

The recipe calls for a round cake tin with a diameter of 20 cm and a height of 10 cm. What is the capacity of the tin? Use 3 as an approximation for pi.

If the raw mixture reaches two thirds of the way up the cake tin, what is the volume of the mixture?

You don't have a round cake tin. You have 3 square cake tins, all 10cm high, with side lengths of 15, 17.5 and 19 cm. Which tin would be best to use and why?

## Recipe for Autumn Apple Cake

3 oz margarine (at room temperature)  
6 oz soft brown sugar  
4 oz plain white flour  
6 oz wholemeal flour  
½ teaspoon mixed spice  
½ teaspoon ground cinnamon  
2 large eggs, beaten  
a little milk  
2 level teaspoons baking powder  
1 tablespoon chopped mixed peel  
grated rind of 1 orange  
3 cooking apples (about 1¼ lbs)

*(see page 1 for metric measures)*

Pre-heat the oven to gas mark 4 (350° F / 180° C).

Prepare a greased 20 cm round tin, lined and with the lining paper brushed with melted fat.

Sift the flours, spices and baking powder together, then tip in any leftover bran from the flour. Peel, core and dice the apples into small cubes, then transfer them into a bowl and toss with a heaped tablespoon of the sieved flour mixture.

In a separate bowl, beat the fat and sugar together until fluffy and pale beige. Then gradually beat in the eggs, a little at a time. After that, carefully fold in the flour mixture. I tend to do both stages at once in my food processor. Lastly, add the grated orange peel, mixed peel and diced apple. If the mixture seems a little dry, add a spot of milk.

Spoon the mixture into the prepared tin and level it off with the back of a spoon. Bake in the centre of the oven for about one hour or until the cake feels springy in the centre when lightly pressed with a fingertip and just shows signs of shrinking away from the edge of the tin. Cool in the tin for 10 minutes before turning it out.

Can be served warm as a pudding topped with cream, or cold as a cake.

## Autumn Apple Cake – answers

### Page 1

What is the ratio of margarine to plain white flour?  $75 : 100 = 3 : 4$

What is the ratio of margarine to wholemeal flour?  $75 : 150 = 1 : 2$

What is the ratio of plain white flour to wholemeal flour?  $100 : 150 = 2 : 3$

What is the ratio of sugar to flour? Remember to add the two types of flour. Ratio is  $150 : 250 = 3 : 5$

If you have a 250 gram pack of margarine, how many cakes could you make?  $75 \times 3 = 225$  grams of margarine.  $75 \times 4 = 300$  grams of margarine. You can make 3 cakes.

You have a 750 gram bag of wholemeal flour. How many cakes of this size could you make?  $750 \div 150 = 75 \div 15 = 5$  cakes.

How much plain flour would you need to make the same number of cakes?  $5 \times 100 = 500$

Using an online supermarket website to find prices. The prices will vary.

You make 5 cakes for a coffee morning. You sell each slice for 50p more than it cost you to make. How much profit do you make?  $5 \times 12$  slices = 60 slices in total, giving £30 profit.

### Page 2

Use the following approximate conversions to rewrite the recipe in metric quantities:

1 ounce = 25 grams	1 teaspoon = 5 grams	1 tablespoon = 3 teaspoons
75 grams margarine (at room temperature)		2 large eggs, beaten
150 grams soft brown sugar		a little milk
100 grams plain white flour		10 grams baking powder
150 grams wholemeal flour		15 grams chopped mixed peel
2.5 grams mixed spice		grated rind of 1 orange
2.5 grams ground cinnamon		500 grams cooking apples

The cake is cooked at Gas Mark 4 or 350°F. Use the formulae  $C = (F - 32) \times \frac{5}{9}$  to convert 350°F to °C.

$350 - 32 = 318$                        $318 / 9 = 35.33$                        $35.33 \times 5 = 176.65$   
 $176.65$  rounded to the nearest 10 = 180°C

The recipe calls for a round cake tin with a diameter of 20 cm and a height of 10 cm. What is the capacity of the tin? Use 3 as an approximation for pi. The area of the tin =  $\pi \times \text{radius}^2 = 3 \times 10^2 = 3 \times 100 = 300\text{cm}^2$

The capacity of the tin = surface area x height =  $300 \times 10 = 3000 \text{ cm}^3$

If the raw mixture reaches two thirds of the way up the cake tin, what is the volume of the mixture? Two thirds of  $3000 \text{ cm}^3 = 2000 \text{ cm}^3$

You don't have a round cake tin. You have 3 square cake tins, all 10cm high, with side lengths of 15, 17.5 and 19 cm. Which tin would be best to use and why?

Volume of 15 cm tin =  $15 \times 15 \times 10 = 2250 \text{ cm}^3$

Volume of 17.5 cm tin =  $17.5 \times 17.5 \times 10 = 3062.5 \text{ cm}^3$

Volume of 19 cm tin =  $19 \times 19 \times 10 = 3610 \text{ cm}^3$

The 17.5 cm tin is the best choice as it is closest in capacity to the 20 cm round tin.

## Autumn festivals from different faiths and cultures

In Britain, thanks have been given for successful harvests since pagan times. The word 'harvest' comes from the Anglo-Saxon word for autumn. It then came to refer to the season for reaping and gathering grain and other grown products.

An early Harvest Festival used to be celebrated at the beginning of the harvest season on 1 August and was called Lammas, meaning 'loaf mass'. Farmers made loaves of bread from the fresh wheat crop. These were given to the local church as the communion bread during a special service thanking God for the harvest.

Nowadays, harvest festivals are traditionally held on or near the Sunday of the Harvest Moon. This is the full moon that occurs closest to the autumn equinox (about Sept. 23). In two years out of three, the Harvest Moon comes in September, but in some years it occurs in October.

Early settlers took the idea of harvest thanksgiving to North America. The most famous one is the harvest *Thanksgiving* held by the Pilgrims in 1621. Thanksgiving is celebrated on the second Monday of October in Canada and on the fourth Thursday of November in the United States.

During the Chinese Festival of the Autumn Moon, the Chinese spend the night watching the harvest moon, eating moon cakes and listening to poems and stories about the moon and the goddess and hare who live in it. The Chinese Moon Festival is also celebrated in Taiwan, Singapore, and Vietnam.

The harvest festival of the Jewish religion is called Sukkot or 'Feast of Ingathering' or 'the 'Feast of Tabernacles'. It is celebrated at the end of the year.

Sikhs and Hindus celebrate *Diwali*, the festival of lights. Small oil lamps, *divas*, are put in houses so Lakshmi, the goddess of prosperity, will visit.

In the autumn, Muslims celebrate the ascension of the Prophet Mohammed. Homes and mosques are often decorated with lights.

Pagans celebrate the autumn equinox, known as *Mabon*, or the Second Harvest. This is a solar festival, celebrated when the length of the day and the night are equal. Pagans pay their respects to the impending dark and give thanks to the waning sunlight as they store their harvest of the year's crops.