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QUICK BREADS

AFTER READING THIS CHAPTER, YOU SHOULD BE ABLE TO:

1. Prepare muffins, loaf breads or tea breads, coffee cakes, and corn breads.
2. Prepare baking powder biscuits and variations of them.



QUICK BREADS ARE the perfect solution for food service operations that want to offer their patrons fresh, homemade bread products but can't justify the labor cost of making yeast breads. Retail bakeries have discovered a great demand for such items as fresh muffins. Also, quick breads have the advantage of being easy to make in almost unlimited varieties using such ingredients as whole wheat flour, rye flour, cornmeal, bran, oatmeal, and many kinds of fruits, nuts, and spices. Even breads made with vegetables have become popular.

As their name implies, quick breads are quick to make. Because they are leavened by chemical leaveners and steam, not by yeast, no fermentation time is necessary. And because they are usually tender products with little gluten development, mixing them takes just a few minutes.

Although prepared biscuit and muffin mixes are available, the only extra work required to make these products from scratch is the time to scale a few ingredients. With a careful and imaginative selection of ingredients, and an understanding of basic mixing methods, you can create superior products.

MUFFIN MIXING AND PRODUCTION METHODS

DOUGH MIXTURES FOR quick breads are generally of two types:

- *Batters* may be either ***pour batters***, which are liquid enough to be poured, or ***drop batters***, which are thick enough to be dropped from a spoon in lumps.
- *Soft doughs* are used for biscuits, discussed in the next section. These products are, with a few exceptions, rolled out and cut into desired shapes, so a stiffer dough is required than for muffins.



Tunneling.

Only slight gluten development is desirable in most quick breads. Tenderness is a desirable quality, rather than the chewy quality of many yeast breads. In addition, chemical leavening agents do not create the same kind of texture yeast does, and they are not strong enough to produce a light, tender product if the gluten is too strong.

Muffin, loaf bread, and pancake batters are mixed as little as possible—only until the dry ingredients are moistened. This, plus the presence of fat and sugar, keeps gluten development low. Overmixing muffin batter not only causes toughness but also produces irregular shapes and large, elongated holes inside the muffins. This condition is called ***tunneling***.

Mixing Methods

The ***muffin method*** is used for muffins, pancakes, waffles, and many loaf-type or sheet-type quick breads. This method is fast and easy. However, the danger is the dough can quickly become overmixed, resulting in toughness. *Muffin batter should be mixed only until the dry ingredients are just moistened.* Do not attempt to achieve a smooth batter. Some loaf breads and coffee cakes are higher in fat and sugar than muffins, so they can withstand a little more mixing without becoming tough.

This mixing method is not as suitable for formulas high in fat, unlike the creaming method described next. Consequently, quick breads mixed by this method are not as rich and cakelike as muffins and other products mixed by the creaming method. They tend to be a little drier, more like breads than cake. High-fat muffins sell better in today's market (in spite of the public's concern about fat), so the muffin method is not used as often as it once was. Keep this in mind as you try the muffin-method formulas in this chapter.

The ***creaming method*** is a cake-mixing method that is sometimes applied to muffins and loaf breads. Actually, there is no exact dividing line between muffin products and cakes, and if they are rich enough, muffin products may be considered cakes rather than breads.

The creaming method is a more time-consuming procedure than the muffin method. However, it produces fine-textured goods and carries less danger of overmixing. The creaming method is especially useful for products with high fat and sugar content because it helps mix the ingredients more uniformly.

PROCEDURE: Muffin Method

1. Sift together the dry ingredients (a).



2. Combine all liquid ingredients, including melted fat or oil.
3. Add the liquids to the dry ingredients and mix just until all the flour is moistened. The batter will look lumpy. Be careful not to overmix (b).



4. Pan and bake immediately (c). The dry and liquid mixtures may be prepared in advance, but once the mixtures are combined, the batter should be baked without delay, or loss of volume may result.



Makeup and Panning of Muffin Products

Muffin tins and loaf pans should be greased with shortening or pan spray and dusted with flour or greased with a commercial pan grease preparation. Sheet pans for cornbreads and other sheet products may be lined with silicone paper.

Paper liners may be used for muffin tins. However, because muffins do not stick to greased tins, they rise more freely and take a better shape and crust without paper liners.

When portioning batter into muffin tins, be careful not to stir the mix and toughen it. For best results, scoop the batter from the outside edge of the bowl, using a portion scoop.

Batters for muffins and quick loaf breads are generally interchangeable. In other words, formulas for banana bread or date nut bread, for example, may be baked as muffins instead of as loaves. Similarly, standard muffin batters may also be baked as loaves or sheets.

Please note that some of the muffin and loaf bread formulas included here, especially those mixed by the muffin method, should be thought of as breads rather than as tea cakes. In particular, their fat and sugar contents are intentionally kept lower than those of the rather rich, oily muffins sometimes sold today. Formulas for richer, more cakelike muffins are included later in the chapter. If you wish to experiment with the two basic muffin recipes to make them richer in fat and sugar, first read the section on cake formula balance beginning on page 385.

PROCEDURE: Creaming Method for Muffins, Loaves, and Coffee Cakes

1. Combine the fat, sugar, salt, spices, and milk powder (if used) in the bowl of a mixer fitted with the paddle attachment.
2. Cream the ingredients together until light (a).



A

3. Add the eggs in two or three stages. Cream well after each addition and before adding more eggs (b).



B

4. Sift together the flour, baking powder, and other dry ingredients.
5. Stir together the liquid ingredients until well combined.

6. Add the sifted dry ingredients alternately with the liquids. Do this as follows:

- Add one-fourth of the dry ingredients. Mix just until blended in (c).



C

- Add one-third of the liquid. Mix just until blended in (d)



D

- Repeat until all ingredients are used. Scrape down the sides of the bowl occasionally for even mixing.

BISCUIT MIXING AND PRODUCTION METHODS

Mixing Methods

The *biscuit method* is used for biscuits, scones, and similar products. It is sometimes called the *pastry method* because it is like that used for mixing pie pastry. In a few instances, biscuit products are mixed with a variation of the *creaming method*.

Biscuit dough is often lightly kneaded, enough to help develop some flakiness but not so much as to toughen the product. Biscuit dough that has been lightly kneaded rises more than dough that has not been kneaded. Unkneaded dough spreads more than kneaded dough and has a more cakelike texture.

Some biscuits are mixed by the creaming method. These have a texture that is more cakelike and less flaky than that produced by the biscuit method. Fat and sugar for creamed biscuit dough should be mixed only until just combined. Continued creaming makes the biscuits excessively cakelike.

PROCEDURE: Biscuit Method

1. Scale all ingredients accurately.
2. Sift the dry ingredients together into a mixing bowl.
3. Cut in the shortening, using the paddle attachment or the pastry knife attachment; if you prefer, cut in the fat by hand, using a pastry blender or your fingers. Continue until the mixture resembles a coarse cornmeal (see variations).
4. Combine the liquid ingredients.
5. Add the liquid to the dry ingredients. Mix just until the ingredients are combined and a soft dough is formed. Do not overmix.
6. Bring the dough to the bench and knead it lightly by pressing it out and folding it in half. Rotate the dough 90 degrees between folds.

7. Repeat this procedure 6 to 10 times, or for about 30 seconds. The dough should be soft and slightly elastic but not sticky. Overkneading toughens the biscuits. The dough is now ready for makeup.

VARIATIONS

Changes in the basic procedure produce different characteristics in the finished product:

1. Using slightly more shortening, and cutting it in less—only until the pieces are the size of peas—produces a flakier biscuit.
2. Omitting the kneading step produces very tender, crusty biscuits, but with less height.

PROCEDURE: Creaming Method for Biscuits

1. Combine the fat, sugar, salt, and milk powder (if used) in the bowl of a mixer fitted with the paddle attachment.
2. Blend just to a smooth paste. Do not continue to cream, as this would make the biscuits too cakelike in texture (a).



3. Add the eggs gradually and blend in thoroughly (b).



4. Sift together the flour, baking powder, and other dry ingredients.
5. Combine the liquid ingredients.

6. Add the sifted dry ingredients alternately with the liquids. Do this as follows:

- Add one-fourth of the dry ingredients. Mix just until blended in.
- Add one-third of the liquid. Mix just until blended in (c).



- Repeat until all ingredients are used. Scrape down the sides of the bowl occasionally for even mixing (d).



KEY POINTS TO REVIEW

- What are the steps in the four mixing methods used for quick breads?
- How does the creaming method for biscuits differ from the creaming method for muffins?
- What precautions should be taken when panning muffins?
- What makeup procedures are used for biscuits?

Makeup of Biscuits

Follow these steps to produce biscuits from biscuit dough:

1. Roll out the biscuit dough into a sheet about ½ inch (1 cm) thick, being careful to roll it evenly and to a uniform thickness. Biscuits approximately double in height during baking.
2. Cut into desired shapes. When using a round hand cutter, cut straight down. Do not twist the cutter. Space the cuts as closely as possible, to minimize scraps. Reworked scrap dough produces tougher biscuits. Cutting into squares or triangles with a pastry cutter knife eliminates scraps that would have to be rerolled. Roller cutters also eliminate or reduce scraps. If cutting with a knife, cut straight down without dragging the knife.
3. Place the biscuits ½ inch (1 cm) apart on greased or paper-lined baking sheets. For straighter sides, place the biscuits upside down. For softer biscuits without crusty sides, arrange the units so they touch each other; these must be broken apart after baking.
4. If desired, brush the tops with egg wash or milk to aid browning.
5. Bake as soon as possible.

BISCUITS I

Ingredients	U.S.	Metric	%
Bread flour	1 lb 4 oz	600 g	50
Pastry flour	1 lb 4 oz	600 g	50
Salt	0.75 oz	24 g	2
Sugar	2 oz	60 g	5
Baking powder	2.5 oz	72 g	6
Butter and/or shortening (regular)	14 oz	420 g	35
Milk	1 lb 10 oz	800 g	65
Total weight:	5 lb 5 oz	2576 g	213%

PROCEDURE

MIXING

Biscuit method (p. 215)

SCALING

Approximately 1 lb (450 g) per dozen 2-in. (5-cm) biscuits

BAKING

400°F (200°C), about 15–20 minutes

VARIATIONS

BUTTERMILK BISCUITS

Use buttermilk in place of regular milk. Reduce the baking powder to 4% (1.5 oz/50 g) and add 1% baking soda (0.4 oz/12 g).

CHEESE BISCUITS

Ingredients	U.S.	Metric	%
Grated cheddar cheese	12 oz	360 g	30

Add the cheese to the dry ingredients.

CURRANT BISCUITS

Ingredients	U.S.	Metric	%
Sugar	4 oz	120 g	10
Dried currants	6 oz	180 g	15

Increase the sugar to the above amount. Add the currants to the dry ingredients. Sprinkle the tops with Cinnamon Sugar (p. 193) before baking.

HERB BISCUITS

Ingredients	U.S.	Metric	%
Fresh chopped parsley	2 oz	60 g	5

Add the parsley to the dry ingredients.

BISCUITS II

Ingredients	U.S.	Metric	%
Shortening	6 oz	150 g	15
Sugar	4 oz	100 g	10
Salt	0.5 oz	12.5 g	1.25
Nonfat milk solids	2 oz	50 g	5
Eggs	3 oz	75 g	7.5
Bread flour	1 lb 12 oz	700 g	70
Cake flour	12 oz	300 g	30
Baking powder	2 oz	50 g	5
Water	1 lb 8 oz	600 g	60
Total weight:	5 lb 1 oz	2037 g	203 %
VARIATION			
Ingredients	U.S.	Metric	%
Butter	7.5 oz	190 g	19
Substitute butter for the shortening.			

PROCEDURE

MIXING

Creaming method for biscuits (p. 215)

BAKING

400°F (200°C)



Biscuits II, without and with egg wash.

PLAIN MUFFINS

Ingredients	U.S.	Metric	%
Pastry flour	2 lb 8 oz	1200 g	100
Sugar	1 lb 12 oz	840 g	70
Baking powder	2.5 oz	72 g	6
Salt	0.5 oz	15 g	1.25
Eggs, beaten	12 oz	360 g	30
Milk	1 lb 12 oz	840 g	70
Vanilla extract	1 oz	30 g	2.5
Butter or shortening, melted	1 lb	480 g	40
Total weight:	8 lb	3837 g	319 %

PROCEDURE

MIXING

Muffin method (p. 213)

PANNING

Grease and flour muffin tins. Fill them one-half to two-thirds full. Exact weight depends on pan size. Average sizes are 2 oz (60 g) for small muffins, 4 oz (110 g) for medium muffins, and 5–6 oz (140–170 g) for large muffins.

BAKING

400°F (200°C), about 20–30 minutes

VARIATIONS

RAISIN SPICE MUFFINS

Ingredients	U.S.	Metric	%
Raisins	8 oz	240 g	20
Cinnamon	0.17 oz (2½ tsp)	5 g	0.4
Nutmeg	0.08 oz (1 tsp)	2.5 g	0.2

Add raisins, cinnamon, and nutmeg to dry ingredients.

BLUEBERRY MUFFINS

Ingredients	U.S.	Metric	%
Blueberries (washed and well drained)	1 lb	480 g	40

Fold blueberries into finished batter.

WHOLE WHEAT MUFFINS

Ingredients	U.S.	Metric	%
Pastry flour	1 lb 12 oz	840 g	70
Whole wheat flour	12 oz	360 g	30
Baking powder	1.5 oz	50 g	4
Baking soda	0.3 oz (2 tsp)	10 g	0.75
Molasses	4 oz	120 g	10

Adjust the flour and leavening as listed above. Add the molasses to the liquid ingredients.

CORN MUFFINS

Ingredients	U.S.	Metric	%
Pastry flour	1 lb 10 oz	780 g	65
Cornmeal	14 oz	420 g	35

Adjust the flour as listed above. (See also the Corn Bread formula on p. 219.)

CORN CHEESE MUFFINS

Ingredients	U.S.	Metric	%
Grated cheddar cheese	1 lb 4 oz	600 g	50

Add the cheese to the dry ingredients in the above corn muffin formula. Use half the amount of sugar.

BRAN MUFFINS

Ingredients	U.S.	Metric	%
Pastry flour	12 oz	360 g	30
Bread flour	1 lb	480 g	40
Bran	12 oz	360 g	30
Raisins	6 oz	180 g	15
Butter, melted	1 lb 4 oz	600 g	50
Milk	1 lb 14 oz	900 g	75
Molasses	6 oz	180 g	15

Adjust the flour, butter, and milk as listed above. Add the raisins to the dry ingredients and the molasses to the liquid ingredients.

CRUMB COFFEE CAKE

Ingredients	U.S.	Metric	%
Butter or shortening	1 lb 4 oz	600 g	50
Streusel (p. 195)	2 lb	960 g	80

Increase the fat as listed above. Pour the batter into a greased, paper-lined sheet pan and spread smooth. Top with streusel. Bake at 360°F (182°C) about 30 minutes.



Muffins, clockwise from top: blueberry, corn, bran.

MUFFINS (CREAMING METHOD)

Ingredients	U.S.	Metric	%	PROCEDURE MIXING Creaming method (p. 214) SCALING Fill tins one-half to two-thirds full. BAKING 400°F (200°C), about 20–30 minutes
Shortening and/or butter	1 lb 4 oz	500 g	50	
Sugar	1 lb 10 oz	650 g	65	
Salt	0.5 oz	12 g	1.25	
Nonfat milk solids	3 oz	70 g	7	
Eggs	12 oz	300 g	30	
Cake flour	2 lb 8 oz	1000 g	100	
Baking powder	2 oz	50 g	5	
Vanilla extract	1 oz	25 g	1.25	
Water	1 lb 14 oz	750 g	75	
Total weight:	8 lb 6 oz	3357 g	334 %	

VARIATIONS

CHOCOLATE CHIP MUFFINS

Ingredients	U.S.	Metric	%
White granulated sugar	1 lb 4 oz	500 g	50
Brown sugar	6 oz	150 g	15
Chocolate chips	12 oz	300 g	30

Adjust the sugar as listed above. Add the chocolate chips to the formula. Top with Cinnamon Sugar (p. 193) before baking.

BLUEBERRY MUFFINS

Ingredients	U.S.	Metric	%
Blueberries (washed and well drained)	1 lb 4 oz	500 g	50

Fold the blueberries into the finished batter.

RAISIN SPICE MUFFINS

Ingredients	U.S.	Metric	%
Raisins	10 oz	250 g	25
Cinnamon	0.2 oz (3 tsp)	5 g	0.5
Nutmeg	0.1 oz (1½ tsp)	2.5 g	0.25

Add the raisins, cinnamon, and nutmeg to the dry ingredients.

CORN BREAD, MUFFINS, OR STICKS

Ingredients	U.S.	Metric	%	PROCEDURE MIXING Muffin method (p. 213) SCALING 60 oz (1700 g) per half-sheet pan (13 × 18 in./33 × 6 cm) 24 oz (680 g) per 9-in. (23-cm) square pan or per dozen small muffins 10 oz (280 g) per dozen corn sticks BAKING 400°F (200°C) for corn bread, 25–30 minutes 425°F (218°C) for muffins or sticks, 15–20 minutes
Pastry flour	1 lb 4 oz	600 g	50	
Cornmeal	1 lb 4 oz	600 g	50	
Sugar	1 lb	408 g	40	
Baking powder	2 oz	60 g	5	
Nonfat milk solids	3 oz	90 g	7.5	
Salt	0.75 oz	24 g	2	
Eggs, beaten	8 oz	240 g	20	
Water	1 lb 12 oz	840 g	70	
Corn syrup	2 oz	60 g	5	
Butter or shortening, melted	12 oz	360 g	30	
Total weight:	6 lb 15 oz	3282 g	279 %	

VARIATION

Use buttermilk instead of water and omit nonfat milk solids. Reduce baking powder to 2.5% (1 oz/30 g) and add 1.25% (0.5 oz/15 g) baking soda.

ZUCCHINI CARROT NUT MUFFINS

Ingredients	U.S.	Metric	%	
Pastry flour	1 lb	480 g	80	
Bran	4 oz	120 g	20	
Salt	0.25 oz	7.5 g	1.25	
Baking powder	0.3 oz (1¼ tsp)	9 g	1.5	
Baking soda	0.2 oz (1 tsp)	6 g	1	
Cinnamon	0.08 oz (1¼ tsp)	2.4 g	0.4	
Nutmeg	0.04 oz (½ tsp)	1.2 g	0.2	
Ginger	0.02 oz (¼ tsp)	0.6 g	0.1	
Pecans or walnuts, chopped	5 oz	150 g	25	
Shredded, unsweetened coconut	2 oz	60 g	10	
Eggs	8 oz	240 g	40	
Sugar	15 oz	450 g	75	
Zucchini, grated	6 oz	180 g	30	
Carrot, grated	6 oz	180 g	30	
Vegetable oil	8 oz	240 g	40	
Water	9.5 oz	360 g	60	
Total weight:	5 lb	2486 g	414	%

PROCEDURE

MIXING

Modified muffin method

1. Sift the flour, leavenings, and spices. Stir in the bran, nuts, and coconut. (Note that the flour and bran together are calculated as 100% in this formula.)
2. Beat the eggs and sugar until well mixed, but do not whip into a foam. Stir in the grated vegetables, oil, and water.
3. Add the egg mixture to the dry ingredients and mix just until combined. The batter may seem too wet, but the bran will absorb a great deal of water as the muffins bake.

SCALING

Fill the tins two-thirds full.


BAKING

400°F (200°C), about 30 minutes



SCONES

Ingredients	U.S.		Metric	%	
Bread flour	1 lb	8 oz	600 g	50	
Pastry flour	1 lb	8 oz	600 g	50	
Sugar		6 oz	150 g	12.5	
Salt		0.5 oz	12 g	1	
Baking powder		3 oz	72 g	6	
Shortening and/or butter	1 lb	3 oz	480 g	40	
Eggs		7 oz	180 g	15	
Milk	1 lb	5 oz	540 g	45	
Total weight:	6 lb	8 oz	2634 g	219	%



Left to right: Raisin Scones, Cranberry Drop Scones.

PROCEDURE

MIXING

Biscuit method (p. 215)

Chill dough after mixing if it is too soft to make up.

MAKEUP VARIATIONS

Scale at 1 lb (450 g), round up, and flatten to ½ in. (12 mm) thick. Cut into 8 wedges.

- Roll out into a rectangle ½ in. (12 mm) thick and cut into triangles as for croissants (see p. 200).
- Roll out into a rectangle ½ in. (12 mm) thick and cut out with cutters, like biscuits.

Place on greased or paper-lined sheet pans.

Egg-wash tops.

BAKING

400°F (200°C) for 15–20 minutes

VARIATION

Ingredients	U.S.	Metric	%
Raisins or currants	12 oz	300 g	25

Add the raisins or currants to the dry ingredients after cutting in the fat.



Left to right: Raisin Scones, Cranberry Drop Scones.

CRANBERRY DROP SCONES

For large-quantity measurements, see page 717.

Ingredients	U.S.	Metric	%	PROCEDURE MIXING Creaming method (p. 215) MAKEUP AND BAKING Using a 2-oz (60-mL) scoop, drop mounds onto parchment-lined sheets pans. Bake as for regular scones, above.
Butter	6 oz	185 g	25	
Sugar	5 oz	150 g	21	
Salt	0.25 oz	8 g	1	
Egg yolks	1.33 oz (2 yolks)	40 g (2 yolks)	5.5	
Pastry flour	1 lb 8 oz	750 g	100	
Baking powder	1.25 oz	38 g	5	
Milk	14 oz	435 g	58	
Dried cranberries	4 oz	125 g	17	
Total weight:	3 lb 7 oz	1731 g	232 %	

ENGLISH CREAM SCONES

Ingredients	U.S.	Metric	%
Pastry flour	1 lb	450 g	100
Baking powder	0.7 oz (4 tsp)	20 g	4.4
Salt	0.2 oz (1 tsp)	5.6 g	1.25
Sugar	2 oz	56 g	12.5
Butter	5 oz	140 g	31
Egg	4 oz	112 g	25
Heavy cream	8 oz	225 g	50
Total weight:	2 lb 3 oz	1008 g	224 %

PROCEDURE

MIXING

Biscuit method (p. 215)

MAKEUP

1. Flatten with palms of hands (or roll out) to 1–1½ in. (3 cm) thick.
2. Cut out 2½-in. (6-cm) rounds. Arrange on sheet pans.
3. Brush tops with heavy cream and sprinkle with granulated sugar.

BAKING

425°F (220°C), about 9–11 minutes

STEAMED BROWN BREAD

Ingredients	U.S.	Metric	%
Bread flour	8 oz	250 g	28.5
Whole wheat flour	4 oz	125 g	14
Light rye flour	8 oz	250 g	28.5
Cornmeal	8 oz	250 g	28.5
Salt	0.25 oz	9 g	1
Baking soda	0.5 oz	15 g	1.8
Baking powder	0.5 oz	15 g	1.8
Raisins	8 oz	250 g	28.5
Buttermilk	2 lb	1000 g	114
Molasses	15 oz	475 g	54
Oil	2 oz	60 g	7
Total weight:	5 lb 6 oz	2699 g	307 %

PROCEDURE

MIXING

Muffin method (p. 213)

SCALING AND COOKING

Fill well-greased molds one-half full, about 16 oz for each quart of capacity (500 g per liter). Cover molds and steam for 3 hours.

ORANGE NUT BREAD

Ingredients	U.S.	Metric	%
Sugar	12 oz	350 g	50
Orange zest, grated	1 oz	30 g	4
Pastry flour	1 lb 8 oz	700 g	100
Nonfat milk solids	2 oz	60 g	8
Baking powder	0.75 oz	21 g	3
Baking soda	0.3 oz (2 tsp)	10 g	1.4
Salt	0.3 oz (2 tsp)	10 g	1.4
Walnuts, chopped	12 oz	350 g	50
Eggs	5 oz	140 g	20
Orange juice	6 oz	175 g	25
Water	1 lb	450 g	65
Oil or melted butter or shortening	8 oz	230 g	33
Total weight:	5 lb 7 oz	2526 g	360 %

PROCEDURE

MIXING

Muffin method (p. 213)

Blend the sugar and orange zest thoroughly before adding the remaining ingredients, to ensure even distribution.

SCALING

1 lb 4 oz (575 g) per 7¾ × 3½-in. (19 × 9-cm) loaf pan
1 lb 10 oz (750 g) per 8½ × 4½-in. (22 × 11-cm) loaf pan

BAKING

375°F (190°C), about 50 minutes

VARIATION

LEMON NUT BREAD

Substitute grated lemon zest for the orange zest. Omit the orange juice and add 8% (2 oz/60 g) lemon juice. Increase the water to 83% (1 lb 4 oz/580 g).

BANANA BREAD

Ingredients	U.S.	Metric	%	PROCEDURE
Pastry flour	1 lb 8 oz	700 g	100	MIXING Muffin method (p. 213)
Sugar	14 oz	400 g	58	
Baking powder	1.25 oz	35 g	5	
Baking soda	0.14 oz ($\frac{1}{4}$ tsp)	4 g	0.6	
Salt	0.33 oz ($1\frac{1}{2}$ tsp)	9 g	1.25	
Walnuts, chopped	6 oz	175 g	25	
Eggs	10 oz	280 g	40	SCALING 1 lb 4 oz (575 g) per $7\frac{3}{4} \times 3\frac{5}{8}$ -in. (19 × 9-cm) loaf pan 1 lb 10 oz (750 g) per $8\frac{1}{2} \times 4\frac{1}{2}$ -in. (22 × 11-cm) loaf pan
Ripe banana pulp, puréed	1 lb 8 oz	700 g	100	
Oil or melted butter or shortening	9.5 oz	280 g	40	
Total weight:	5 lb 9 oz	2583 g	369 %	BAKING 375°F (190°C), about 50 minutes

DATE NUT BREAD

Ingredients	U.S.	Metric	%	PROCEDURE
Shortening and/or butter	8 oz	200 g	40	MIXING Creaming method (p. 214) Fold the dates and nuts into the finished batter.
Brown sugar	10 oz	250 g	50	
Salt	0.25 oz	6 g	1.25	
Nonfat milk solids	1.5 oz	35 g	7	
Eggs	6 oz	150 g	30	SCALING 1 lb 4 oz (575 g) per $7\frac{3}{4} \times 3\frac{5}{8}$ -in. (19 × 9-cm) loaf pan 1 lb 10 oz (750 g) per $8\frac{1}{2} \times 4\frac{1}{2}$ -in. (22 × 11-cm) loaf pan
Cake flour	1 lb	400 g	80	
Whole wheat flour	4 oz	100 g	20	
Baking powder	0.75 oz	20 g	3.75	
Baking soda	0.25 oz	6 g	1.25	BAKING 375°F (190°C), about 50 minutes
Water	15 oz	375 g	75	
Dates (see Note)	10 oz	250 g	50	
Walnuts, chopped	6 oz	150 g	30	
Total weight:	4 lb 13 oz	1942 g	388 %	
NOTE: After scaling the dates, soak them in hot water until very soft. Drain and chop.				

VARIATION

Substitute other nuts, or a mixture, for the walnuts. For example: pecans, toasted hazelnuts, or toasted almonds.

Substitute other dried fruits for the dates. For example: prunes, dried apples, raisins, dried figs, or dried apricots.

PLUM CAKE					
Ingredients	U.S.		Metric	%	
Pastry flour	1 lb	4 oz	600 g	100	
Nonfat milk solids		0.5 oz	15 g	3	
Salt		0.25 oz	8 g	1.5	
Cinnamon		0.06 oz (1 tsp)	2 g	0.3	
Brown sugar	10	oz	300 g	50	
Butter	10	oz	300 g	50	
Eggs	9	oz	270 g	45	
Milk	1 lb	2 oz	540 g	90	
Topping					
Italian-style prune plums, halved and pitted	3 lb	12 oz	1800 g	300	
Cinnamon Sugar (p. 193)	4	oz	120 g	20	
Total weight:	8 lb	3 oz	3955 g	659	%
VARIATION					
For a more cakelike texture, mix the dough using the creaming method for biscuits.			Top the cake with Streusel (p. 195) instead of cinnamon sugar before baking.		

PROCEDURE

MIXING

Biscuit method (p. 215)
Because of the moisture in the brown sugar, the dry ingredients must be rubbed through a sieve when sifted.

SCALING AND MAKEUP

One recipe is enough for one half-sheet pan, three 9-in. (23-cm) square pans, or four 8-in. (20-cm) square pans. Spread the dough in greased and floured pans. Arrange plum halves, cut side up, on top of the dough. Sprinkle with cinnamon sugar.

BAKING

400°F (200°C) for 35 minutes

ALMOND POPPY SEED MUFFINS					
Ingredients	U.S.		Metric	%	
Butter	14	oz	450 g	60	
Sugar	1 lb	2 oz	560 g	75	
Eggs	12	oz	375 g	50	
Pastry flour	1 lb	8 oz	750 g	100	
Baking powder		0.25 oz (1½ tsp)	8 g	1	
Baking soda		0.16 oz (1 tsp)	5 g	0.7	
Salt		0.2 oz (1 tsp)	6 g	0.8	
Poppy seeds	1	oz	30 g	4	
Almond extract		0.16 oz (1 tsp)	5 g	0.7	
Buttermilk	1 lb		500 g	67	
Total weight:	5 lb	5 oz	2689 g	359	%
VARIATION					
LEMON POPPY SEED MUFFINS					
Flavor the muffins with lemon extract instead of almond extract.					

PROCEDURE

MIXING

Creaming method (p. 214)
Mix the poppy seeds with the dry ingredients after sifting.

SCALING

Fill tins two-thirds full.

BAKING

375°F (190°C), about 30 minutes

APPLE SPICE MUFFINS

Ingredients	U.S.	Metric	%	PROCEDURE
Butter	14 oz	435 g	60	MIXING Creaming method (p. 214)
Brown sugar	1 lb 2 oz	540 g	75	
Salt	0.25 oz (1 tsp)	7 g	1	
Cinnamon	0.15 oz (2 tsp)	4 g	0.6	
Nutmeg	0.05 oz (¾ tsp)	1.5 g	0.2	
Eggs	8 oz	240 g	33	SCALING Fill tins two-thirds full.
Pastry flour	1 lb 4 oz	600 g	83	
Whole wheat flour	4 oz	120 g	17	
Baking powder	0.5 oz	15 g	2	
Baking soda	0.25 oz (1½ tsp)	7 g	1	
Buttermilk	12 oz	360 g	50	
Applesauce	1 lb 2 oz	540 g	75	
Total weight:	5 lb 15 oz	2869 g	397 %	

PUMPKIN MUFFINS

Ingredients	U.S.	Metric	%	PROCEDURE
Butter	12 oz	375 g	50	MIXING Creaming method (p. 214)
Brown sugar	1 lb	500 g	67	
Ginger	0.05 oz (¾ tsp)	1.5 g	0.2	
Cinnamon	0.04 oz (½ tsp)	1.25 g	0.17	
Nutmeg	0.03 oz (⅓ tsp)	0.75 g	0.1	
Allspice	0.05 oz (¾ tsp)	1.5 g	0.2	
Salt	0.14 oz (½ tsp)	4.5 g	0.6	
Eggs	6 oz	190 g	25	SCALING Fill tins two-thirds full.
Pastry flour	1 lb 8 oz	750 g	100	
Baking powder	0.33 oz (2 tsp)	10 g	1.4	
Baking soda	0.33 oz (1¾ tsp)	10 g	1.4	
Buttermilk	12 oz	375 g	50	
Pumpkin purée, canned	10 oz	300 g	40	
Total weight:	5 lb	2519 g	336 %	
				BAKING 400°F (200°C), about 30 minutes

DOUBLE CHOCOLATE MUFFINS					
Ingredients	U.S.		Metric		%
Butter	10	oz	300	g	40
Sugar	11	oz	340	g	45
Semisweet chocolate	1 lb		500	g	67
Eggs	5	oz	150	g	20
Flour	1 lb 8	oz	750	g	100
Baking soda	0.5	oz	15	g	2
Salt	0.14	oz (½ tsp)	4.5	g	0.6
Buttermilk	1 lb 4	oz	625	g	83
Chocolate chips	12	oz	375	g	50
Total weight:	6 lb 2	oz	3059	g	407 %

PROCEDURE

MIXING

Creaming method (p. 214)

Melt the chocolate, cool it to room temperature, and cream it into the butter and sugar mixture. Fold the chocolate chips into the finished batter. (Note that there is no baking powder in this formula, only baking soda.)

SCALING

Fill tins two-thirds full.

BAKING

400°F (200°C), about 30 minutes

GINGERBREAD										
Ingredients	Old-Fashioned Gingerbread					Pain d'Épices (French Gingerbread)				
	U.S.			Metric	%	U.S.			Metric	%
Pastry flour	2 lb	8	oz	1100 g	100	1 lb	4	oz	550 g	50
Rye flour			—	—	—	1 lb	4	oz	550 g	50
Salt		0.25	oz	7 g	0.6		0.25	oz	7 g	0.6
Baking soda		1.25	oz	33 g	3		1.25	oz	33 g	3
Baking powder		0.6	oz	16 g	1.5		0.6	oz	16 g	1.5
Ginger		0.5	oz	14 g	1.25		0.5	oz	14 g	1.25
Cinnamon			—	—	—		0.25	oz	7 g	0.6
Cloves, ground			—	—	—		0.12	oz	3.5 g	0.3
Anise, ground			—	—	—		0.5	oz	14 g	1.25
Orange rind, grated			—	—	—		0.5	oz	14 g	1.25
Currants			—	—	—		8	oz	220 g	20
Molasses	2 lb	8	oz	1100 g	100			—	—	—
Honey			—	—	—	1 lb	14	oz	825 g	75
Hot water	1 lb	4	oz	550 g	50	1 lb	4	oz	550 g	50
Butter or shortening, melted		10	oz	275 g	25		10	oz	275 g	25
Total weight:	7 lb	1	oz	3095 g	281 %	6 lb	15	oz	3078 g	279 %


PROCEDURE	Pain d'Épices: greased loaf pans. Fill about one-half full of batter.
MIXING	
Muffin method (p. 213)	BAKING
	375°F (190°C)
PANNING	
Old-Fashioned Gingerbread: greased, paper-lined sheet pans, about 6.5–7 lb (3 kg) per sheet (one recipe per sheet).	

GINGERBREAD

The name *gingerbread* is given to a wide variety of cakes and shortbreads or cookies. Gingerbread in its various forms dates back to the Middle Ages, when highly spiced foods were common. Different regions of Europe developed their own varieties of gingerbreads, using their own blends of spices.

Originally, gingerbreads were sweetened with honey, just as the French *pain d'épices* (pronounced pan day PEECE, meaning “spice bread”) from the city of Dijon still is today. After sugarcane products became more widely available and economical, most regions switched to molasses to sweeten their gingerbreads.

SODA BREAD

Ingredients	U.S.	Metric	%	PROCEDURE
Pastry flour	2 lb 8 oz	1200 g	100	MIXING
Baking powder	2 oz	60 g	5	Biscuit method (p. 215). Stir in currants after cutting in fat. Refrigerate after mixing if too soft to make up.
Baking soda	0.5 oz	15 g	1.25	SCALING
Salt	0.5 oz	15 g	1.25	1 lb (450 g) per unit
Sugar	2 oz	60 g	5	MAKEUP
Shortening or butter	4 oz	120 g	10	Round into a ball-shaped loaf. Place on sheet pan. Cut a deep cross into the top.
Currants	8 oz	240 g	20	BAKING
Buttermilk	1 lb 12 oz	840 g	70	375°F (140°C), about 30–40 minutes
Total weight:	5 lb 5 oz	2550 g	212 %	VARIATION
				Add 1.25% (0.5 oz/15 g) caraway seeds. Omit currants or leave them in, as desired.

TERMS FOR REVIEW

pour batter
drop batter

tunneling
muffin method

creaming method
biscuit method

pastry method



QUESTIONS FOR REVIEW

1. If you made a batch of muffins that came out of the oven with strange, knobby shapes, what would you expect to be the reason?
2. What is the most important difference between the biscuit method and the muffin method?