# Methods of Combining Flour Mixtures: THE MUFFIN METHOD 

## WHAT MAKES THIS METHOD DIFFERENT?

$>$ the use of a liquid fat which is added to the wet ingredients
$>$ the combining of all the wet ingredients at once into the dry ingredients
$>$ the stirring of the batter only enough to wet the dry

## THE STEPS IN MAKING MUFFINS:

1. Sift together the dry ingredients.
2. Beat together the liquid ingredients.
3. Combine the wet ingredients all at once into the dry and stir only to wet the dry ingredients. If you stir the batter too much, if you beat the batter, you will have peaked muffins with tunnels.

## THE MAIN INGREDIENTS IN MUFFINS:

- Flour: to thicken and form the framework - it has gluten which is developed by mixing
- Leavener: to make it rise
- Liquid: to moisten and hold the product together
- Fat: to give flavour and tenderness
- Sugar: to give flavour and aid in browning

- Eggs: to add flavour, colour, moisture, and food value

| MUFFIN SCORECARD |  |
| :---: | :---: |
| Good Muffins | Poor Muffins |
| Appearance <br> - Golden brown colour <br> - Rounded top <br> - Pebbly surface | Appearance <br> - Peaked, smooth surface <br> - Pale colour <br> - Burned |
| Texture <br> - Uniform medium texture <br> - Slightly moist crumb <br> - Free from tunnels | Texture <br> - Too dry <br> - Doughy <br> - Tunnels |
| Tenderness <br> - Light and tender <br> - Breaks easily without crumbling | Tenderness <br> - Tough <br> - Elastic |
| Flavour <br> - Pleasing <br> - No fat taste | Flavour <br> - Too flat <br> - Too salty |

## FLOUR MIXTURES:

There are 4 types of flour mixtures, depending on the proportion of liquid to flour.

| Flour Mixture | Ratio of Liquid to Flour | Examples |
| :---: | :---: | :---: |
| Pour Batter | 1 liquid to 1 flour | Pancakes |
| Drop Batter | 1 liquid to 2 flour | Muffins, cakes |
| Soft Dough | 1 liquid to 3 flour | Biscuits, bread |
| Stiff Dough | 1 liquid to $4-6$ flour | Rolled cookies, pastry |

## QUICKBREADS:

Quickbreads are easy to make and include the flour mixtures which are made with baking powder and baking soda.

Quickbreads are also usually served hot from the oven. To retain the heat of hot breads, place a fresh napkin in or on a serving dish and keep it covered tightly.

To increase the nutritional value of flour mixtures, add or use such things as: whole wheat flour, wheat germ, dried fruits, granola, and nuts.

## LEAVENERS:

Leaveners make flour mixtures rise so they become light and porous. Most frequently we rely on carbon dioxide gas $\left(\mathrm{CO}_{2}\right)$ which is produced in a number of ways:
> Baking powder + liquid + heat $=\mathrm{CO}_{2}$
Baking soda + acid + liquid + heat $=\mathrm{CO}_{2}$


When baking soda is used as a leavening agent, an acid substance must also be present as one of the ingredients to produce $\mathrm{CO}_{2}$. Acid ingredients include sour milk, orange juice, lemon juice, cream of tartar, or molasses.

Baking powder is composed of starch and acid so does not require an additional acid ingredient to be added.

