

A WORD ON QUICK BREADS & BATTERS

Quick breads and batters are well, just what they say they are – quick. Over the years they have become part of our American cooking tradition. Unlike yeast breads, they need no time to rise or bulk ferment. They usually are fast baking in the oven or on the stovetop. Even better, quick breads are easy to mix. "How do they accomplish this feat?", you might ask. The answer is by the power of chemical leaveners, a.k.a. baking soda and baking powder (which have been used for about the last 200 years).

Baking soda (sodium bicarbonate) when mixed with a liquid and an acid creates carbon dioxide gas, and thus helps gives rise to doughs. This is why you see buttermilk in many quick bread recipes. When there is no other acid in dough, or for that matter the wrong acid to sodium bicarbonate ratio, there is the magic of **baking powder**. This is a combination of baking soda along with an acid salt (such as aluminum phosphate) to create the dough rising reaction. Once mixed into the dough, in the presence of liquid, baking powder goes to work.

The difference in rises and textures of baked or stove-top cooked doughs lies in the ratios of leaveners, flours, liquids and fats. In other words, it's straight up chemistry. Changing the ratios in any given quick bread or batter recipe is going to create much different results.

The *dough*, or *biscuit, method* of making quick breads employs the technique of "cutting" solid fats (butter, shortening, or lard) into the flour. If the fat remains in larger pieces (about the size of a pea or a dime) you can achieve a flaky texture (such as a biscuit or scone). As the fat pieces melt during baking, they create small pockets between layers of dough; as the dough rises, these layers steam or split apart. Blending the fat completely into the flour will result in a rich tender mouth feel (such as with soda breads or shortcakes). The fats will coat the glutens in the flour, helping to keep them from binding together resulting in a lighter smoother texture.

In the *muffin*, or *batter, method* of mixing quick breads the fat is whisked together with the liquid ingredients before being mixed with the dried, as opposed to cutting solid fat into the dry ingredients. Any solid fats (such as butter or lard) should be melted so that they can blend well with the other liquids. Having all the ingredients at room temperature before mixing will help keep the fats liquefied.

A lower ratio of liquid to dry ingredients will make doughs, much like with the biscuit method, which can be shaped and baked off the same way. With a higher ratio of liquids in the mix, a looser wet batter will form. These batters need to be baked in a pan (to help it hold its shape) or they can be pan or deep fried. Just as with the biscuit method, over mixing (when using wheat flours) will over develop the glutens, stiffening the batter or dough. Leaving some small lumps in the batter/dough is fine, large lumps should be broken up.

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Considerations

- Double acting baking powder (which most baking powders sold today are) has one acid that acts once the dough is mixed and another that needs heat to activate. This gives a bit more rising power in the oven.
- Baking soda can be stored almost indefinitely if it is sealed tight so that it doesn't absorb off odors and flavors (a result of it absorbing airborne acids). Baking powder has a relatively shorter shelf life (6 months-1 year). Keep in a sealed container in a cool dry place. The cornstarch in it will absorb moisture and the chemicals will slowly react.
- Baking powder can be made from mixing 2 parts cream of tartar and 1 part baking soda.
- Make sure not to overwork the doughs/batters (and thus the glutens). This will lead to overly tough/chewy results.
- Additions of extra flavorings (ex. herbs, cheese, meats, etc.) should not be too moist. This could throw off the dry to liquid ratio.
- To keep fats solid in the biscuit method for doughs, all the ingredients can be refrigerated before being mixed.
- After the dough is made, quickly get it formed and into the oven or pan to trap in as much carbon dioxide as possible. The reaction happens once the leaveners and liquid mix. The longer the dough sits out, the more gas it will lose before it can be trapped in.