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QUICK BREADS | TRANSCRIPT | LESSON 1

All About Quick Breads



GLUTEN-FREE
BAKING
ACADEMY

Welcome to Module 3. As you learned last week, once you start to become familiar with a few basic techniques, recipes, and ingredients, the gluten-free horizon starts to open up with lots of possibility. This week, we take what we've learned in Module 2 a step further by adding ingredients that leaven our bread, giving it increased volume, lighter texture, and “crumb”—which is a term used to describe the pattern and size of holes in a bread. This week we'll be “quick” bread baking. A process that actually began many moons ago by mixing acids like sour milk with bases like baking soda. This process was further fine-tuned with the discovery and development of baking powder in the mid-19th century.

While historically on a timeline you'd see flatbreads first, then followed by yeasted breads, and then—with the age of “convenience,” quick breads—this course walks you through these discoveries in a remixed, but gradual order more fitting to learning and mastering them all. Last week was basically mixing flour with water (flatbreads), this week it's the same, but we'll add lifting power for immediate baking (quick breads), and finally next week, it's flour and water plus some biological alchemy that takes more time, patience, and care (yeasted breads).

Bread leavened by chemical reaction with ingredients like baking soda and baking powder instead of yeast is appropriately called “quick bread.” You're probably pretty familiar with examples of quick breads: cake, brownies, cookies, banana bread, biscuits, cornbread, muffins, pancakes, scones, and soda bread. While we will be sharing recipes for sweet and savory quick breads in this course, our focus here is on bread baking, so cakes, cupcakes, and other desserts will be available in a separate sweet-tooth-focused course entirely.

This module introduces you to some basic gluten-free quick bread recipes, a few new ingredients, and loads of technique. As in Module 2, you'll work on a few practice recipes and then you can access extra recipes to try out on your own time.



Quick Breads: A Little History Lesson

Before baking soda (aka sodium bicarbonate) was used for baking, “soda” aka “pearl ash,” “potash,” or “pot ash” (aka potassium carbonate) was a common-place bread leavening ingredient that was likely discovered as flatbreads were being baked over fires on hot stones. As the name implies, “pot ash” was just that: the ashes from a fire mixed with an acid like sour milk or citrus. When combined, the lactic acid in the sour milk reacted with the pot ash to produce carbon dioxide, which when trapped in the dough by gluten and or eggs, resulted in airy, bubbly lightness ideal for baked cakes and biscuits.

In the early 1800s, this technique eventually evolved to include the use of baking soda which is why bread prepared this way is often referred to as “soda bread” or “Irish soda bread,” even though some of the earliest references of using soda ash in bread baking can be credited to Native Americans.¹

With quick breads, consistency with the sour-milk and soda became problematic, since the acid levels in the milk were difficult to predict, and in order to benefit from any leavening effect, bread had to be baked immediately upon mixing.² Eventually, an acidic by-product of wine fermentation called Cream of Tartar was introduced to quick-bread baking to ensure better results. Challenges are opportunities to think outside of the box and they usually result in something life-changing, right? Well, in an effort to create a yeast-free bread for his wife who had allergies to eggs and yeast, chemist Alfred J. Bird invented the first modern baking powder in 1843. And soon after that, chemist Eben Horsford and his partner George Wilson established Rumford Chemical Works (a brand you’ll still find on store shelves today) to fine-tune and patent a baking powder combination of ingredients that delivered leavening power and predictability for quick bread baking.

Baking powder changed the quick bread game. It’s a balanced package of acid and base: sodium bicarbonate (alkaline as you know), an acidifying agent (usually cream of tartar), and a drying agent to keep it from pre-maturely activating (cornstarch or potato starch). See, to activate baking powder, it requires mixing



with wet ingredients and heat from the oven—so the magic doesn't start and stop in a bowl on your countertop, it mainly occurs in the oven which is more baker friendly.

Tips for Making Gluten-Free Quick Breads

Here are some important techniques to keep in mind for quick bread baking this week.

1. Always preheat the oven fully before baking your bread and move the rack to the center position—unless specified otherwise, always bake quick breads in the center of the center oven rack. Make sure that when you place your bread in the oven that it's pushed back towards the center of the rack before you close the door. The front of the rack can be a cooler part of the oven, especially with older appliances.
2. Always keep wet and dry ingredients separate until ready to mix and bake. Remember, chemical leavening agents are activated when mixed with wet ingredients and you want that leavening action to happen inside the oven as much as possible. Make sure that the oven is preheated, your pan is greased or lined, you have your silicone kitchen spatula handy so you are ready to mix, transfer to the baking dish, and put in the oven in a matter of minutes.
3. When using psyllium, ALWAYS whisk together the dry ingredients until the psyllium is thoroughly incorporated. Then, add the wet ingredients. When water comes into contact with psyllium, it clumps up and expands and works its gluten-free binding magic. You want it uniformly incorporated into the dry ingredients before adding liquid.
4. Don't open the oven door to peek while bread is baking! Once quick bread is in the oven, no opening the oven door until the timer goes off. Gluten-free quick bread baking is sensitive, and it's imperative that you keep the temperature consistent in the oven for a good bake. If you peek, you may end up with a sunken quick bread center—still tasty, but aesthetically compromised.



5. Allow the bread to cool fully before cutting into it. In most cases, gluten-free ingredients need to set before being sliced. If gluten-free loaves are prematurely sliced before the bread is cooled, you can tear the crumb, smush the crumb, and sink your loaves. Patience is key when gluten-free baking. If you want to enjoy a bread warm, allow it to cool fully, then slice and gently reheat in the toaster oven or oven.

Ok! Now you've got the know-how you need to try out some gluten-free quick breads. Don't forget to take that lesson recap while the info is fresh. Happy baking.

Footnotes:

1. <http://www.sodabread.info/history/>

2. For the history of baking powder, see the following: Anon., *Eighty Years of Baking Powder History: 1859-1939*, Rumford, RI, Rumford Chemical Works, 1939; Eben Norton Horsford, *The Theory and Art of Bread-Making: A New Process Without the Use of Ferment* (Cambridge, Mass: Welsh Bigelow & Co., 1861); Paul R. Jones, "Justus Von Leibig, Eben Horsford and the Development of the Baking Powder Industry," *Ambix* 40, Part 2 (1993): 65-74; Anon., "History of the Rumford Chemical Works," typed manuscript, dated April 15, 1947, in the East Providence Historical Society; Anon., "The Story of Baking Powder — The Story of Rumford," reprint from *Oil-Power in East Providence Historical Society*.

