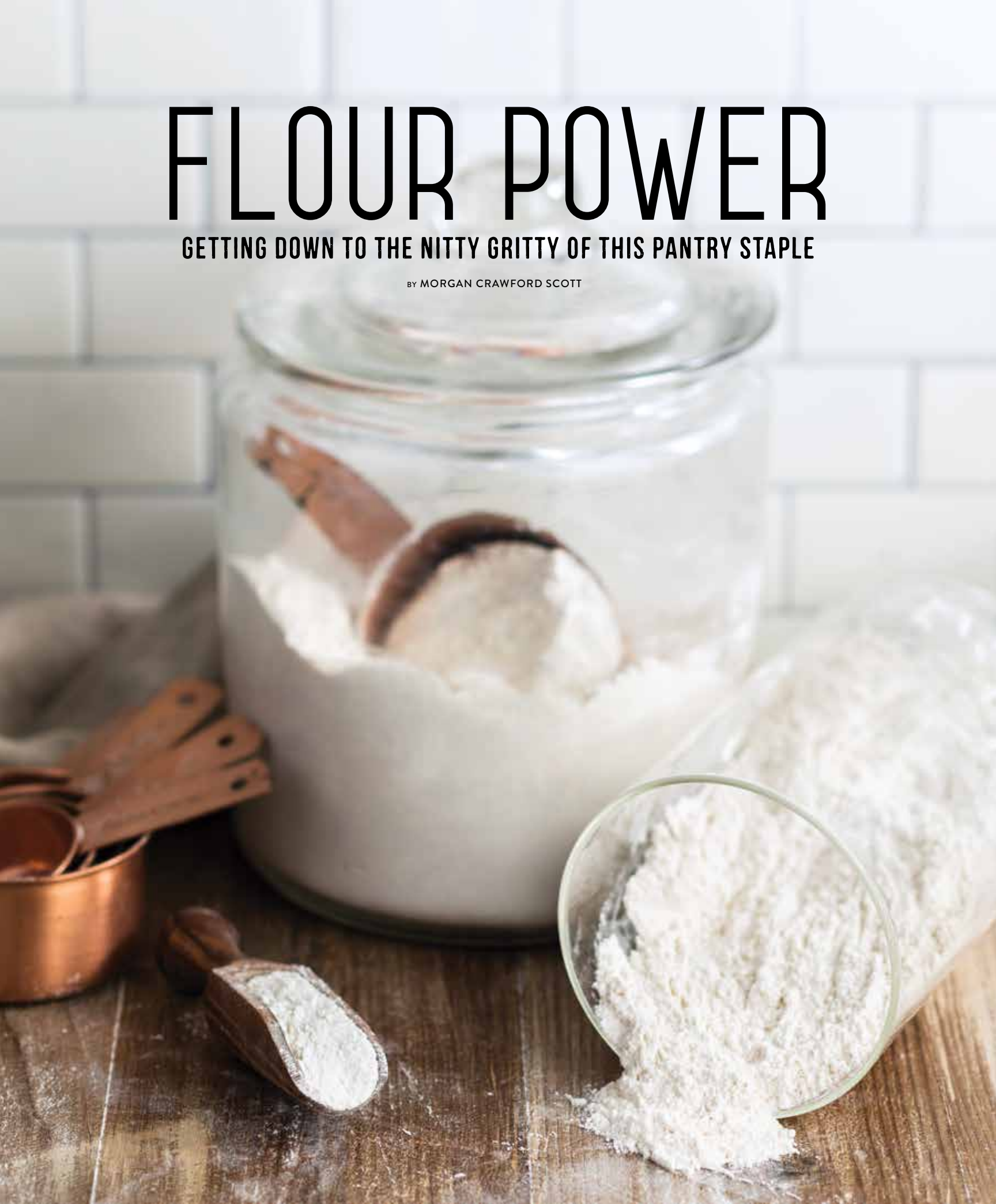


FLOUR POWER

GETTING DOWN TO THE NITTY GRITTY OF THIS PANTRY STAPLE

BY MORGAN CRAWFORD SCOTT



When you bite into your favorite baked good, a flaky pastry, a slice of sandwich bread, or even your choice of pasta, you might not be thinking about the single most important component in it: flour. This modern-day baking essential has had quite the journey over the last 30,000 years. Even with the most primitive humans, scientists have confirmed through cave paintings that flour did in fact exist in the diets of people in the Paleolithic era. They likely made it by hand-grinding the wheat grains with a smooth, flat stone—a process we can liken to using a mortar and pestle.

Lucky for us, today's flour comes neatly packaged on the shelves at our local grocer, and we are leaps and bounds from the single, hand-ground variety. Now, there are plenty of flours on the market to choose from. Common varieties like all-purpose, self-rising, cake, wheat, and bread might initially come to mind, but lesser-known options, such as gluten-free, almond, potato, and more, also serve a purpose and are well-liked by many, too. While all flours fundamentally achieve the same goal, they vary in texture, flavor, nutritional value, and other factors, all of which play a role in the outcome of a particular recipe. That said, understanding this ingredient is a key to success in the kitchen. Whether you're a novice or an experienced home cook, this handy flour primer will have you cooking and baking like a pro in no time.

BREAKING DOWN THE BASICS

TO UNDERSTAND HOW FLOUR WILL PERFORM, IT'S HELPFUL TO FIRST KNOW HOW IT'S MADE, AS WELL AS ITS MOST IMPORTANT COMPONENTS.

GRAIN

Most flour is made by milling grains, usually wheat. Similar to corn, you must strip the husk (or the bran) of the wheat berry for it to be edible. The wheat berry is then in its purest form of the wheat kernel, still containing the endosperm, which makes up much of the kernel, and the germ, which makes up a small part of the kernel, before it goes through the refinement process. Essentially, bran-on milling will result in whole wheat flours, and bran-off will result in white flours. You can also find flours made of other grains like spelt or rye, which are also members of the wheat variety, or you may even come across alternative flours made from nuts, rice, and more.

MILL

The milling process is what turns the grains into flour, and there are two standard ways to achieve this: stone-milled and roller-milled. These methods are done exactly as they sound. The former grinds grains between two stones, but because temperature regulation (key to preventing grain spoilage) was not dependable, the search for another means came about, resulting in roller-milling options. It's the standard commercialized way for modern-day operations and runs on electricity, which allows the temperature to be controlled. Once milled, the flour's texture can vary from fine to coarse. Coarsely ground provides more texture, while finely ground makes for a lighter bake.

PROTEIN

The protein content in flour can vary from about 5 to 15 percent, which is a big range. This percentage is determined by the class of wheat, growing conditions, and more. The protein content in flour has a direct correlation with how tender your baked goods will be. Lower protein means a softer flour that doesn't develop much gluten, thus creating a tender bake for foods such as cakes, cookies, and biscuits. Conversely, higher protein content means a harder, stronger flour that develops more gluten for a structured bake, such as chewy, crusty breads.

The White Lily Way

If you've never lived in the American South, you likely have never heard of White Lily flour, but it's the go-to for the *Southern Cast Iron* Test Kitchen and millions of Southerners when it comes to biscuit baking. Founded in Knoxville, Tennessee, in 1883, White Lily flour is ground from a specific variety of soft winter wheat with low protein, which is crucial for light and fluffy biscuits. It's available in all-purpose and self-rising, as well as bleached and unbleached. Although White Lily is readily and widely available in the South, it can be hard to find elsewhere in the US. Visit whitelily.com/store-finder to locate a retailer in your area or to order online.





CHOOSING THE RIGHT FLOUR

FLOUR IS NOT A ONE-SIZE-FITS-ALL INGREDIENT. IF YOU'RE NEW TO BAKING, OR YOU'RE EXPANDING YOUR BAKING REPERTOIRE, FAMILIARIZING YOURSELF WITH THE MOST COMMON VARIATIONS OF FLOUR IS KEY TO GOOD RESULTS.

ALL-PURPOSE

Also referred to simply as AP, this is the baseline of flours and a kitchen necessity. It's the most accessible flour on the market, has a moderate protein content, and is versatile yet predictable, making it the most suitable choice for almost all your baking needs.

PROTEIN CONTENT: 9–12%

BEST USED FOR: Cookies, brownies, cakes, soft rolls, buns (almost everything!)



SELF-RISING

This soft all-purpose flour has baking powder, a leavening agent, and salt, which strengthens the gluten, mixed with it. This makes baking biscuits, quick breads, and more a cinch. But because of its additives, it has a shorter shelf life, so it should be used within 6 to 8 months after opening.

PROTEIN CONTENT: 8.5%

BEST USED FOR: Biscuits, quick breads, scones



CAKE

This finely milled flour has the lowest amount of protein among all flours. The superfine nature of cake flour gives it more surface area, which means it absorbs more liquid. Thus, when recipes call for a high ratio of sugar to flour, which we often see in cakes, this flour is able to accommodate the high sugar content while allowing the batter to rise nicely without collapsing. Like the name suggests, it's best used for cakes that are traditionally light, fluffy, and tender, such as angel food.

PROTEIN CONTENT: 7–8%

BEST USED FOR: Cakes, cupcakes



WHOLE WHEAT

This type of flour is made by grinding, or milling, the entire wheat berry, including the germ, endosperm, and bran. This results in a higher protein content, a sturdier texture, darker color, and heartier flavor that's great in hefty baked goods. White whole wheat flour is milled similarly but starts with a hard white wheat instead. Many consider this type of flour to be a healthier option due to the high percentage of protein and fatty acids that aren't stripped when milled. But be sure to store it in a cool, dark place and replace it after 6 months since it becomes rancid more quickly.

PROTEIN CONTENT: 11–15%

BEST USED FOR: Crackers, pancakes, pasta

BREAD

The strongest of all flours—meaning it has the highest protein content—and with remarkable chew, this flour works wonders in recipes that need strong gluten to make it rise. It gives great support to hard-crust breads and produces a nice brown top when baked.

PROTEIN CONTENT: 12–14%

BEST USED FOR: Pizza dough, yeast breads, bagels



PASTRY

This flour has a low protein content and fine texture, getting these characteristics from the soft white wheat (or soft red winter wheat) from which it's made. On the protein scale, it lands between all-purpose and cake flours, making it quite versatile; it can produce tender crusts for holiday pies, as well as soft cookies and moist muffins.

PROTEIN CONTENT: 8–9%

BEST USED FOR: Pastries, piecrusts, cookies, muffins, biscuits

BLEACHED VS. UNBLEACHED

When grabbing a bag of all-purpose flour, you may have never noticed a small detail on the label: bleached or unbleached. For the most part, these two can be used interchangeably, but there are slight differences worth noting. The biggest difference is color, which reflects how they're produced. All milled flour will have a slight yellow cast that eventually turns white when exposed to air and "aged" over time; this is unbleached flour. Some brands add chemicals to quickly and artificially age the flour to produce a whiter color, creating bleached flour. If tasted on their own, there isn't much difference; however, your final baked good could be more noticeably affected. Bleached flour is softer and finer, so foods made with it are in turn softer in texture and lighter in color, which might be preferred when creating specialty bakes such as a white wedding cake. Unbleached flour is off-white and denser, generating more structure and texture.

Measuring

How you measure flour matters a lot more than you might realize. Never directly scoop flour with your measuring cup—this compacts the flour into the cup, and you'll end up with too much. Instead, loosely spoon flour into a dry measuring cup, slightly overfilling it, and then scrape a straight edge across the top of the cup to remove the excess. This assures you have the correct amount of flour for your recipe.



Substitutions

1 CUP CAKE FLOUR—Measure 1 cup all-purpose flour, then remove 2 tablespoons of it. Add 2 tablespoons cornstarch, and then sift them together.

1 CUP BREAD FLOUR—Measure 1 cup all-purpose flour. Note, your baked good might have slightly less chew.

1 CUP SELF-RISING FLOUR—Sift together 1 cup all-purpose flour, 1½ teaspoons baking powder, and ¼ teaspoon salt.

Storage

For maximum shelf life, store specialty—such as rye, spelt, or sprouted—and whole-grain flours in the refrigerator or freezer in an airtight container or resealable plastic freezer bag, not the paper bag it comes in. Because these flours contain oils, they're more likely to become rancid when stored at room temperature. White flours, such as all-purpose, bread, and self-rising, are fine stored in an airtight container in a cool, dry spot in a cabinet. ●