culinate

Flour to the people

Going with the local grains

By Amy Halloran
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We've been going more and more locavore for several years now. First it was produce, then dairy and meat and fish. Now we're starting to demand that our shelf-stable staples, such as Oregon salt and California pasta, also come from as close as possible.

Featured recipes
- Whole-Wheat Pancakes
- Whole-Wheat Tahini Crackers

Flours, too, are going regional. Two-thirds of the U.S. wheat crop comes from the Midwest, but wheat can be grown nationwide. Local flours are showing up at farmer's markets, in the bulk aisles at natural-food stores, and even alongside regular flours on supermarket shelves. If you haven't seen any yet, call your local cooperative extension office or state organic farming organization. And remember that local milling doesn't always mean local growing, so be sure to ask.

Barley flour from Fairhaven Organic Flour Mill, in Washington state.

Like grass-fed meats, local flours behave a little differently in the kitchen than their supermarket cousins. Lest your enthusiasm for these flours fizzle in a failed batch of muffins, here's a guide to help you understand and use them.

First, know the norm. A typical five-pound bag of flour on the supermarket shelf might contain milled grain grown in Montana, Canada, and Kansas.

Wheats are blended before milling to provide consistent performance for bakers. In general, blending works to help flour behave as you would expect: bread flours should rise in your recipes, and pastry or all-purpose flours will give you cakes and pancakes with tender texture and crumb. (For more info on the various types of flours available at the store, check out Ellen Jackson's Culinate piece on flours.)

We used hard white whole-wheat flour in these tahini crackers.

Small mills don't have the luxury of blending, so what's in the field is what you get. And what you get is lovely stuff that's reflective of the growing conditions of each particular season, even the microclimate of a certain rural neighborhood. Flours can speak as loud and clear as good butter and fine chocolate.

Beautiful as these qualities are, it can be hard to know how to handle a local flour. Keep in mind the basic terminology for standard supermarket flours:

- Bread flour is made from hard wheat, whose higher protein content builds the strong gluten structures desirable in leavened breads.
- Cake and pastry flour are made from soft wheats.
- All-purpose flour is mixed from soft and hard wheats.
- Many of these flours are red wheats, which have more color in the bran layer. White wheats have less.

When you buy local flour, you'll have to figure out which types of wheat went into the bag. You may learn

Local flours

New England: Maine Grains mills state-grown grains at the Somerset Grist Mill, in the former county jail. Aurora Mills and Farm also grows and mills only Maine grains. Farmer Ground Flour is farmer-owned, and stone-mills organically grown grains in New York's Finger Lakes region. Wild Hive also stone-mills organic grains in New York, in the Hudson Valley.

Mid-Atlantic: In Pennsylvania, Daisy Mill is organic pastry flour sourced locally and ground on roller mills.

Midwest: Lonesome Stone Milling is a stone mill for organic grains in Wisconsin. Windmill Flour uses an actual Dutch windmill to mill Mchigan wheat. Heartland Mill is a grower-owned mill in Kansas that uses both hammer and stone mills.

South: Carolina Ground stone-mills North Carolina grains. Anson Mills in South Carolina focuses on heirloom antebellum grains.

West: In Washington state, Fairhaven Organic Flour Mill and Bluebird Grain Farms grow and mill a variety of organic grains. Camas Country Mill uses a Danish stone-mill system to make flours from grains grown in Oregon's Willamette Valley. And Community Grains makes whole-grain flours from California grains.

only that the wheat was hard or soft. (Check, too, to see whether your local flour is a named seed variety — such as Warthog, Red Fife, or Turkey Red — since each variety has a different flavor.) But that's enough to get you started.

In general, if you want to make quick breads and cakes, you'll want soft wheat's lower protein profiles. Hard wheats are for breads, but they can make great, if sturdy, pancakes. However, you probably won't want to try your favorite yeast-bread recipe with pastry flour.

Usually, local flours are stone-milled. Stone mills are cheaper than hammer or roller mills, and therefore easier for a small local operation to purchase. Some people also feel that stone mills create a nutritionally superior product than hammer or roller mills, but all of the mill types do the same thing: create powdery dust from seeds.

Local flours are also typically milled from the whole grain, which keeps all three parts of the kernel — the germ, bran, and endosperm — in the end product. While this is a nutritional boon, it requires some extra care in handling. Because of the germ's volatile oils, flour can spoil more quickly when all the flavors of the germ and bran travel with the starchy endosperm. So buy your flour freshly milled, and store it in the freezer or fridge if you don't plan on using it quickly — say, within a month or two.

Sifting — at the mill or in your kitchen — removes the bran from the flour. (If you don't remove the little fragments of bran, they'll act like little knives in your bread dough, slicing apart gluten strands as they form and reducing loft.) Sifted soft-wheat or pastry flours lend baked goods a lighter texture.

If you bake frequently, you may have already noticed that humidity can affect how much flour and liquid your dough or batter needs. With local flours, these variations occur more frequently, because the moisture of the flour itself isn't consistent. So be ready to add more liquid or flour, depending on how things are coming together.

Local flours also vary in their protein levels — a real challenge for bread bakers. Start out slow, using only half local flour and half standard flour in your favorite bread recipe.

The best way to handle the ambiguities of local flours is to embrace them wholeheartedly, not tentatively. And start with something like crackers or pancakes, which nobody expects to be as lofty as bread or cakes, and are great vehicles for the subtle, grassy, bran-rich flavors of local flours.

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