For more on dough improvers, old and new, see page 2·352.

a new mixer attachment or a better strain of yeast. You can use these tools, if you so choose, to make only breads that hew to a traditional aesthetic. Direct injection of air, for example, can produce rustic-style breads and pizza doughs with enormous bubbles for that prized open-crumb structure. Indeed, there is almost no limit to how open a crumb you can make using this totally organic, safe, and free ingredient!

We aren't suggesting that every baker needs to bake the same way, using Modernist powders and vacuum sealers and the like. Far from it. But by adopting some of these modern techniques and ingredients, such as incorporating polydextrose, you can produce baguettes that are crunchier and tastier than you have ever bought in a market (see page 2.348). In fact, we'd go even further and assert that the perfect baguette has not yet been baked. As long as baguette bakers don't turn up their noses at new techniques and ingredients, they can get still closer to perfection. Artisan and home bakers should also be aware of these techniques and products because they make bread baking more reliable, convenient, and affordable than ever before.

The Inherent Appeal of the New

We humans love variety, and in the world of food, there are two ways we get it. It can be imported from another culture. This is how it came to be that you're able to get sushi in a strip mall in South Dakota and pizza in Korea. Or foods can be invented.

With bread, much of the "new" has been a regurgitation of the old. Americans learned to love French and Italian breads. Everyone became familiar with ethnic breads such as bagels and tortillas. More recently, Chinese steamed buns, once relegated to the dim sum cart, have become trendy. Now pork belly is showing up in the United States at weddings and corporate receptions. But importation is nearly exhausted as a source of novelty. There are simply few interesting breads left to import—but as with so many things that involve food, that could change.

There's another issue, too. Bread is under attack like never before. The anticarb crowd is growing louder. The attack on gluten, the very protein that makes bread, well, *bread*, is unprecedented.

For bread and bakers to thrive, something must change. That change should include a new vision of the economics of bread. We need to ask why we are willing to pay \$15 or \$25 or more for a bowl of pasta but not for a fine loaf of bread (see page 2.182). Why are farmers rewarded for quantity, not quality (of what they produce)? Now is the time for each baker to embrace his or her inner inventor. If we are to continue to feed our desire for variety and to make baking a rewarding profession for innovative people who are eager to put their stamp on the food industry, bakers must make room for invention. And it is our mission with *Modernist Bread* to both persuade people of the importance of invention in bread making and supply those who are so inclined with a guidebook on how to do it—whether they do their baking at home, in a restaurant, or in a commercial bakery.

Today, there is no recognized Modernist movement in the world of bread. But we think there should be. And we offer this combination of very practical knowledge and ideas that are right at the cutting edge of research in bread making to empower bakers of all persuasions. Some readers will want to make traditional breads in the old way, and some will want to make those same breads in new ways. But we're hoping that you will heed our call to follow your inspiration to make your own breads in your own way.

None of this is to say we should throw out tradition. If you want to prepare your dough entirely by hand and bake it solely by the heat of a wood fire, this book tells you how to do that. But for us, that is the starting point, not the end.

If we want to advance the quality of bread, we should be willing to experiment. Our aim is to provide the encouragement and the knowledge needed to unleash your creative impulses, leading to breads that are truly new, such as the Pressure-Cooked Potato Broth Sourdough on page 4.84 or the Ironic Challah on page 4.279. Some of these inventions, we hope and expect, will be as popular in the next century as baguettes and croissants have been in the past century. So whether you are a strict traditionalist, an avid Modernist, a home baker, a restaurant chef adding homemade bread to your menu, or an artisan baker, we hope our book will open your eyes to possibilities, to innovation, to different ways of thinking. Each of the hundreds of wonderful breads we have today was



You won't find these breads on your local grocery store's shelves. We turned our kitchen into a culinary laboratory to create modern interpretations of classic bread recipes, such as the tandoor-baked brioche naan shown above (page 5·23) and a high-hydration panettone (page 4·266) that has a more open crumb structure.