PREFERMENTS

A **preferment** is made using commercial yeast or levain and prepared in advance of the final dough. It's ripe and ready to use when it's mixed into the final dough and the yeast is fully activated. The results are accelerated fermentation and reduced mixing and **proofing** times.

It's true that preparing a preferment such as a levain, sponge, **biga**, or **poolish** takes additional time and effort at the beginning of the baking process. But a more pronounced and complex flavor, improved dough structure, and longer shelf life justify the extra work.

Diastatic malt powder is added to some formulas when a high percentage of flour is used in the preferment (stiff levains or bigas, for example, which are about 60% hydration). During long fermentations, yeasts consume large amounts of simple sugars. If nothing is done to compensate for the depletion of the sugar, the baked bread may have a dull crust color; there's just not enough residual sugar to ensure proper browning. To avoid this issue, bakers add diastatic malt powder to the dough. See Functional Ingredients, page 296, for recipes that use diastatic malt powder.

Poolish (see page 3·20) Sponge (see page 3·22) Biga (see page 3·24) *Pâte fermentée* (see page 3·26)

Liquid rye levain (see page 3·55) Liquid levain (see page 3·54)

Levains generally contain a wider variety of species of yeast than commercial yeast-based preferments. Most commercial baker's yeasts are a single strain of *Saccharomyces cerevisiae*, while levains typically contain a mix of different species of yeasts and lactic acid bacteria. The characteristics of levains are also impacted by the lactic acid bacteria, which affects the flavor of the dough as well as the strength of its gluten network (see The Science of Sourdough, page 284). You can find tips on customizing a levain to your own tastes for flavor and acidity in our section on Manipulating the Outcome of Your Levain, page 3·52.