



# A GUIDE TO THE NUMBERS

Flours are measured in terms of their protein and ash content. Understanding what these numbers mean will help you to determine which flour is best for your uses.

## PROTEIN

Protein indicates the amount of gluten available in the flour. Gluten is the substance that develops when the protein, which occurs naturally in wheat flour, is combined with liquid. Because gluten is able to stretch elastically, it is desirable to have a higher gluten flour for yeast-raised products, which have doughs that are stretched extensively; like pizza, most breads, and bagels. For piecrusts, cookies, and pastry to be short and crumbly, a lower protein flour is better. Protein levels range from 7% in pastry and cake flours to as high as 15% in high-gluten bread flour.

## ASH

Ash measures the amount of mineral content that remains in the flour after milling. A whole wheat flour which contains all of the wheat berry or kernel will have a high ash of 1.50 or so. When the wheat kernel is milled, the heart of the kernel, or endosperm, makes up the majority of a white flour. The further away the miller mills from the endosperm, the higher the ash content. Generally speaking, a lower ash content is preferable, since it means that the flour is the purest and closer to the heart of the wheat kernel. Our experience guides us to specify the appropriate ash for a given flour based upon the desired baking characteristics.

## ENRICHMENT

The majority of states have required enrichment since the 1940's in all bread and all-purpose flours. An enriched flour contains niacin, thiamin, iron and riboflavin, the B vitamins and minerals which have been determined to aid in the prevention of diseases like rickets and pellagra in children.

## SINCE 1790

As a company, we are committed to uphold the legendary virtues of King Arthur.<sup>®</sup> Integrity and honesty are our key business principles. We are also committed to a hands-on relationship with our customers. We are fundamentally a flour company. We're all passionate about baking here and we believe in helping bakers achieve the best quality products that they can. To that end, we offer bakeries our technical knowledge and support, our point of sale materials, and the best flour that money can buy.

## WHAT YOU WON'T GET FROM US

Given a choice, you probably wouldn't add things like benzoyl peroxide, chlorine dioxide, and potassium bromate to your cookies. But at least one of these chemicals is found in most flours in America.

Most flour companies add benzoyl peroxide or chlorine dioxide to chemically whiten-read: bleach-their flours. If you've ever used acne cream than you're already familiar with its active ingredient, benzoyl peroxide. As for Chlorine dioxide? Most people would rather put chlorine in their washing machine or swimming pool. We figure that you prefer a rich, natural, cream-colored flour to a chemically processed, stark-white flour.

Some flour companies add potassium bromate to artificially strengthen their flours. Potassium bromate is a suspected carcinogen that has been banned from food products in Europe, Japan, and Canada. Food in California that contains potassium bromate must bear a warning label. Because of the wheat we select and the way we mill it, our flour is naturally strong in protein, and needs no strengthening.

King Arthur<sup>®</sup> Flour contains no bleach, no bromate, and no chemicals of any kind. What you get in place of all those added ingredients is our 214-year commitment to purity. Not a bad tradeoff if you ask us.