

Anatomy of Bread

CRUST

The exterior layer of a loaf of bread that develops and browns during baking, providing structure and maintaining the bread's shape. A good crust will have a uniform colour and a smooth, even appearance, free of imperfections such as bubbles or cracks.

GLUTEN NETWORK

Gliadin and glutenin, the two proteins which make up gluten, begin to form rubber-like strands when hydrated by water and mixed. The gluten network is both strong and extensible, allowing air bubbles to be trapped and expand during proofing, which provides volume to the finished bread.



BREAK & SHRED

The rough portion of the crust formed during baking, where the top and side wall of the bread meet. It develops when the exterior crust of the bread forms, but the interior of the bread continues to expand, forcing the top of the loaf to lift and pull away from the sides of the pan. A desirable break and shred is high, smooth, and even.

CRUMB

The soft interior of bread. The crumb is formed when gas bubbles develop and expand during fermentation and baking, then get trapped and set by the protein and starch network in the bread.

CRUMB COLOUR

The degree of whiteness of the crumb. A bright and white crumb colour is desirable for standard pan or sandwich bread.

PROTEIN CONTENT

The total amount of protein in flour. Dough made from flour with a high protein content is able to withstand processing steps, has a strong structure, and produces pan bread with good volume and optimal crumb structure.

CELL

The individual holes visible in a slice of bread. Specific cell characteristics, such as cell shape, size, and distribution are evaluated to determine the overall quality of the bread.

