



Nu-BAKE[®]

Use in *Sheeted Dough Systems*

Improved Machineability, Emulsification, and Shelf Life Extension

Most bakeries utilize dough conditioners to modify proteins or carbohydrates in the flour to enhance the gas-holding properties; while emulsifiers are used to react with fatty acids and starches in flour to retard staling and improve machineability. **Nu-BAKE[®]** provides characteristics found in emulsifiers and dough conditioners due to the naturally occurring glycolipids, peptides, starches and pentosans present. Extracted from rice bran using a patented process, **Nu-BAKE[®]** is a 100% natural ingredient, is Kosher Parve, non-GMO, and provides a clean ingredient statement as “rice extract” or “rice bran extract”.

In 1975, Casier discovered the effect of rye and wheat pentosans on bread making properties of wheat and other starch materials. In every case the improvement (volumetric yield, dough consistency, crumb properties and ping quality) achieved by adding pentosans exceeded that achieved by adding gluten. D’Appolonia at North Dakota State University also identified the bread improving effects of pentosans. Since **Nu-BAKE[®]** contains some naturally occurring pentosans in addition to it being rich in glycolipids, it is an excellent choice for use in sheeted dough systems!

Nu-BAKE[®] has the following effects on dough systems:

- The Pentosans effect water absorption & gluten hydration
- The Fat content effects starch retrogradation
- The Fat/Protein interaction creates emulsification of water and oil/shortening
- The Emulsification enhances flexibility, improves machine ability and reduces stickiness
- The Water-binding characteristics provide shelf-life extension & freshness
- The Starch-Fat combinations provide excellent freeze-thaw stability

In addition to these functional characteristics, **Nu-BAKE[®]** also provides Vitamins, Minerals, Protein, Antioxidants and rice bran oils. These unique characteristics are the basis for this patented ingredient which provides both **FUNCTION + NUTRITION**.

Proposed Use Rates:(based on total dry ingredient weight of formulation)

Sheeted Doughs	0.25-1.50%
Cookies & Dough Systems	0.50-1.25%
Tortillas	0.15-0.40%