

BREAD IMPROVERS & CONDITIONERS

WHAT IS BREAD IMPROVER?

A bread improver is a flour-based blend of several components with specific functional properties designed to modify dough characteristics and give quality attributes to bread. Bread improvers are mostly made from a combination of enzymes in addition to various emulsifiers, soya flour and malt flour for their dough conditioning and improving properties.

Bread improvers have a range of functional benefits; they can enable the rapid development of a dough through to the finished baked product by reducing the time required to achieve a comparable result from the traditional long fermented doughs of the past.

THE FUNCTION OF BREAD IMPROVERS

There are 2 primary functions of bread improvers in dough:

1. Stimulate & Promote Gas Production by the Yeast.

Carbon dioxide is formed in a dough when the available sugars are broken down by various enzymes. Bread improvers promote the continuous and constant production of gas throughout the fermentation period until the yeast activity is stopped by the high temperatures in the baking oven.

2. Aids in Gas Retention.

Bread improvers are manufactured for the many styles of dough making and mixing equipment in use today.

Bread improvers rapidly modify the gluten structure in a dough, to produce a matrix so that the minimum amount of gas can be retained and hence assist the expansion or leavening of the dough.

Bread improvers may also carry within them a blend of enzymes that assist in the gluten matrix modification as well as yeast foods or sources of nitrogen for the yeast to use. It is important for the baker to be aware of the differences between bread improvers as one used successfully in a particular application may encourage too much softening or strengthening of the gluten matrix when used in another. This could lead to major and costly problems in the bakery.

Once the correct bread improver has been selected for an application, it must be used at the correct usage rate.