

9.4: Functions of Salt in Baking

Salt has three major functions in baking. It affects: (1) Fermentation, (2) Dough, and (3) conditioning Flavor

Fermentation

Fermentation is salt's major function:

- Salt slows the rate of fermentation, acting as a healthy check on yeast development.
- Salt prevents the development of any objectionable bacterial action or wild types of fermentation.
- Salt assists in oven browning by controlling the fermentation and therefore lessening the destruction of sugar.
- Salt checks the development of any undesirable or excessive acidity in the dough. It thus protects against undesirable action in the dough and effects the necessary healthy fermentation required to secure a finished product of high quality.

Dough Conditioning

Salt has a binding or strengthening effect on gluten and thereby adds strength to any flour. The additional firmness imparted to the gluten by the salt enables it to hold the water and gas better, and allows the dough to expand without tearing. This influence becomes particularly important when soft water is used for dough mixing and where immature flour must be used. Under both conditions, incorporating a maximum amount of salt will help prevent soft and sticky dough. Although salt has no direct bleaching effect, its action results in a fine-grained loaf of superior texture. This combination of finer grain and thin cell walls gives the crumb of the loaf a whiter appearance.

Flavor

One of the important functions of salt is its ability to improve the taste and flavor of all the foods in which it is used. Salt is one ingredient that makes bread taste so good. Without salt in the dough batch, the resulting bread would be flat and insipid. The extra palatability brought about by the presence of salt is only partly due to the actual taste of the salt itself. Salt has the peculiar ability to intensify the flavor created in bread as a result of yeast action on the other ingredients in the loaf. It brings out the characteristic taste and flavor of bread and, indeed, of all foods. Improved palatability in turn promotes the digestibility of food, so it can be said that salt enhances the nutritive value of bakery products. The lack of salt or too much of it is the first thing noticed when tasting bread. In some bread 2% can produce a decidedly salty taste, while in others the same amount gives a good taste. The difference is often due to the mineralization of the water used in the dough.

This page titled [9.4: Functions of Salt in Baking](#) is shared under a [CC BY-NC-SA 4.0](#) license and was authored, remixed, and/or curated by [Sorangel Rodriguez-Velazquez](#) via [source content](#) that was edited to the style and standards of the LibreTexts platform.