**Baking**

Various foodstuffs are baked using microbes. Among these Bread is one of the common baking product.

**Bread production**

Flours and meals for the preparation of bread are usually made from wheat or rye, occasionally from maize or barley. They are all high in starch and the first two contain a considerable proportion of protein commonly designated as ‘gluten’. In addition, there are traces of sugar and some diastase. Flour is mixed with water to form a dough. For some types of bread little sugar as also added. The series of changes which occur in the flour and other constituents of the dough before baking into bread is termed ‘primary fermentation’. An alcoholic fermentation by yeast is an essential step in the production of bread, this process is known as the levening of bread. A product of action of microorganisms is involved in the production of bread. However, there are following three basic types of rising breads, which are the following.

**White or common bread**. In this bread preparation the moistened flour is mixed with yeast, *Saccharomyces cerevisiae* and is allowed to stand for several hours in a warm place. Flour itself contains little free sugar, but there are sufficient quantities of starch splitting enzymes in it to produce some sugar during the leavening process. The sugar is rapidly fermented by the yeast with the production of alcohol and carbon dioxide, the latter causing the rising of the bread. During the baking process the alcohol is driven off.

**Sour bread.** This bread is a sour dough, from which ‘starter’ is saved to inoculate the next batch. The organisms appear to be *Escherichia coli* and *Enterobacter* species which produce a mixed lactic acid fermentation, i.e. accompanying the gas there is always some lactic acid which tends to make the bread taste sour.

**Salt-rising bread.** This type of bread is dependent upon the spontaneous fermentation by wild yeasts and common contaminating bacteria, *E.coli* and *Enterobacter* types. Inn this case, salt is added to the bread which cuts down some of the extraneous contamination and allows the bread to rise during fermentation.