

YEAST

GENERAL PROVISIONS AND
STAPLE FOODS

Yeast is a type of single-celled fungus that is used as a key ingredient in the production of many general provisions and staple foods.

- Most used in baking, where it is used as a leavening agent to help **bread** and other baked goods rise. Yeast feeds on the sugar in the dough and produces carbon dioxide gas, which causes the dough to expand and rise.
- Also used to produce fermented foods and beverages, such as **beer, wine, and cheese**. In these applications, yeast is used to convert sugars into alcohol and other byproducts through a process called fermentation.

Market Scope

- The global yeast market was valued at around USD 4.5 billion in 2020 and is projected to reach USD 6.3 billion by 2027, with a CAGR of 4.5% from 2021 to 2027.
- Apart from the food and beverage industry, yeast is also used in producing animal feed, biofuels, and pharmaceuticals, which provide additional growth opportunities for the yeast market.
- The Asia-Pacific market is expected to grow at the highest CAGR due to the growing demand for bakery and alcoholic beverages, especially in countries such as China and India.
- **Angel Yeast Co. Ltd., Lesaffre Group, Lallemand Inc., Associated British Foods plc, Kerry Group, Koninklijke DSM N.V.** are some of the major players in the yeast market.



Commercial production

Commercial production of yeast typically involves a fermentation process using a specific yeast strain.

1. Preparation of the culture medium: A nutrient-rich culture medium is prepared, which typically contains sugars, amino acids, vitamins, and minerals. The medium is sterilized to prevent contamination.

2. Inoculation: A pure culture of the selected yeast strain is added to the sterilized medium and allowed to grow. This process is known as inoculation.

3. Fermentation: The inoculated culture is transferred to a larger fermentation vessel, allowing it to grow and multiply. During this, the yeast consumes the sugars in the medium and produces **alcohol and carbon dioxide**.

The fermentation conditions, including temperature, pH, and oxygen level, are carefully controlled to optimize the growth and fermentation of the yeast.

4. Harvesting: Once the fermentation is complete, the yeast cells are harvested from the culture medium using a centrifuge or filtration system.

5. Drying: The harvested yeast cells are typically washed and then dried to reduce the moisture content using a spray dryer or other drying method.

6. Packaging: The dried yeast is then packaged into containers, such as bags, drums, or boxes, for distribution to customers.