

Yeasts and Molds

Summary

Characteristics of yeasts and molds and their effect upon the management of health, food resources and the food industry.

Main Core Tie

Food Science

[Strand 5](#)

Background for Teachers

Yeasts: Sugar Loving Microorganisms (Food Science, Safety and Nutrition Curriculum Guide: National FFA Foundation, Madison, Wisconsin. 1991.) Yeasts are microorganisms. They are small, single-celled plants. They are members of the family fungi (singular, fungus) which also includes mushrooms. Fungi differ from other plants in that they have no chlorophyll.

Some microorganisms such as bacteria thrive on many different types of food. But most yeasts can live only on sugars and starches. From the digestion of sugar foods, yeasts produce carbon dioxide gas and alcohol. These two products have been useful to man for centuries in the production of certain foods and beverages. They are responsible for the rising of bread dough and the fermentations of root beer, wines, and other beverages. They also play the initial role in the production of vinegar.

Intended Learning Outcomes

Understanding the characteristics and nature of yeast and molds will help to understand how these microorganisms affect food production.

Instructional Procedures

See attachments below:

The students will participate in a PREASSESSMENT activity to evaluate their knowledge of yeasts and molds and their relationship to other fungi and to foods we eat.

The students will participate in a YEAST DEMONSTRATION AND EXPERIMENT and complete the YEAST EXPERIMENT worksheet with their observations.

As a demonstration, the teacher will prepare SOURDOUGH STARTER and discuss how yeast produces it. (See SOURDOUGH BACKGROUND.) As the starter needs to ferment for 3- 5 days, the students will observe the daily progress of the starter.

As a SUMMATIVE EVALUATION, the students will use the sourdough starter, when it is ready, to prepare SOURDOUGH PANCAKES.

Authors

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