

Yeast Bread: Final Evaluation Project

Summary

Bread is a staple food item in most countries in the world.

Main Core Tie

Dietetics and Nutrition 1

[Strand 4](#)

Background for Teachers

THE FOUR BASIC FOOD MOLECULES

When considering integration of scientific principles of food preparation and scientific principles of nutrition four food molecules stand out as basic to both areas. Their names are commonly known: water, carbohydrate, protein, and fat. A deep acquaintance with them is advocated. They are the four food chemicals that are most closely connected and have the most influence on other food molecules.

One of them, water, is our most familiar and least visible chemical compound. A second one, carbohydrate, is produced only by living organisms. The third one, protein, is at the heart of all organic movement, change, and growth and exhibits the most important characteristics of life itself. The fourth one, fat, as heterogeneous as proteins, has only one purpose, to store energy.

All come together in some food products. Such food products generally will provide an example of the basic principles presented in each unit of this guide. Producing such a food product will provide a capstone experience. Yeast breads is used here as a capstone experience that integrates and synthesizes concepts from each preceding section.

When natural or manmade disasters cause people to go without food, the body has no fuel for energy. People starve. At those times, one of the foods most likely to be given to aid those people is wheat. The Midwestern plain states in the United States are nicknamed the bread basket of the world because that region raises so much wheat, and because that wheat feeds and has fed people in many other nations of the world.

The most common use of wheat is in the form of flour. However, wheat can easily be prepared as a cereal by boiling it and adding milk and honey. Many breakfast cereals have wheat as the basic ingredient. Wheat can also be cracked in a blender and used to make pancakes and other quick breads. Breads made from wheat flour are staple (much used or commonly used) foods in many lands.

Bread is traditionally referred to as the staff of life because it is the common food of the common man in most nations. Breads come in wide varieties and may also be made from grains other than wheat. For example, tacos made from corn is the bread of Mexico and other Latin American countries. Corn, oats, rye, and rice are commonly used in combination to wheat flour. (See THE STORY OF BREAD in Resources.) Many varieties of breads appear in supermarkets or they can easily be made at home.

Intended Learning Outcomes

Students will synthesize, demonstrate, and enjoy the integration and holistic application of principles of food cookery and nutrition by utilizing knowledge from each unit in the food and science guide to produce quality yeast breads.

Instructional Procedures

See preface materials:

The students will participate in a PREASSESSMENT activity YEAST BREAD PRETEST to evaluate

their knowledge of yeast bread making.

The teacher will show samples of white and whole wheat flour and/or other baked goods to the students. Discuss the advantages and disadvantages of making bread at home vs. buying from bakery.

The students will perform a lab experiment making gluten balls. The students will record their observations and answer questions on GLUTEN EXPERIMENT worksheet.

For the gluten experiment, the teacher may choose to use the following flours: (assign each unit to use a different flour).

All purpose white flour

Whole wheat

Unbleached flour (Turkey Red winter wheat)

Cake flour

Pastry flour

Special bread flour

Rye flour

Corn meal flour

Rice flour

During instruction on the function of ingredients used in yeast breads, the students will classify them as specified in class. The students will take notes on YEAST BREAD NOTE TAKING OUTLINE.

Each group of students will be assigned an ingredient used in bread making, and make a poster advertising their ingredient with the intent of selling it. they will need to emphasize the function of the ingredient. The posters will be shared with the class. the teacher will demonstrate the making of white bread to illustrate the conventional method of mixing bread. (See WHITE BREAD DEMONSTRATION.)

The students will complete WHITE BREAD DEMONSTRATION WORKSHEET and complete lab sheets in preparation for their bread making lab.

Given instruction on the two methods for mixing bread (the conventional method and the mixer method), the students will employ the conventional method in class as specified, by participation in a bread making lab. The lab(s) may prepare loaf bread or rolls, depending on the teacher/student preference. (See suggested YEAST BREAD LAB RECIPES or the teacher and/or students may choose other recipes.)

NOTE TO TEACHER: depending on the amount of time in class, this lab may require two days to complete. Mix the first day, refrigerate overnight, and complete lab the following day.

Also, the teacher may choose to demonstrate some/or all the recipes used in lab before the students perform their lab activity. The students will review their knowledge of the nutritional value of grain products by completing NUTRITIONAL EVALUATION OF YEAST PRODUCTS worksheet. The teacher will need to supply resource information of the students' use. (Use any good text with nutritional charts or copies of the Nutritive Value of foods booklet from the U.S.Department of Agriculture, available through the county extension agents).

The teacher will read examples of stories written about bread making. the students will then write a story about someone making bread. Students may work in groups for this activity. some of the information will be correct and some incorrect. The proceedings. (See BREAD STORY EXAMPLES.) Each group of students will design a bulletin board to illustrate a major concept of bread making. the students will design a prototype on scratch paper for teacher approval before constructing.

The students will participate in a circular response activity in which they will draw numbers. The teacher will ask each students a question and they will answer in the order of the numbers drawn. (See CIRCULAR RESPONSE QUESTIONS.)

The students will participate in a YEAST BREAD WORD SEARCH. The students will participate in an

opposing panel. The classroom chairs/tables will be arranged in a U shape.

The class is divided into two groups. Each group will make up 16 review questions with answers. The spokesman for each group will select 4 people, one at a time, from the opposite team to answer a question. Then, the other team will take a turn to ask a question. One student is assigned to keep score.

The students will review the yeast bread unit in preparation of the final test by completing STEPS TO YEAST BREAD PREPARATION worksheet. correct in class.

The students will participate in a summative evaluation to be evaluated by taking a UNIT TEST - YEAST BREADS.

Authors

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