

Pie Crust Experiment

Summary

This experiment can be used as a pre-assessment to see what experience and knowledge the students have in preparing pies. It can also be used as an introduction to pies.

Main Core Tie

Dietetics and Nutrition 1

[Strand 4](#)

Time Frame

1 class periods of 90 minutes each

Group Size

Small Groups

Materials

Handouts:

Home assignment for Pies

Pie experiment

Ingredients needed per class:

1/3 cup lard

1/3 cup butter

1/3 cup margarine

1/3 cup oil

1/3 cup shortening

5 1/3 cups all-purpose flour

1 cup cake flour

3 tbs. salt

12 tbs. water

6 pie plates

6 pastry cloths

6 sockinets

Classroom set of textbooks

Background for Teachers

The teacher needs to have a basic understanding of preparing pie crusts; the main ingredients used and their function and if substituted with another food the difference in taste, color, texture and the qualities associated with each ingredient.

Student Prior Knowledge

The student needs to know how to prepare a pie crust and the techniques needed to make a flaky and tender crust.

Intended Learning Outcomes

The student will be able to identify the difference in taste, flavor, texture and appearance as they substitute different ingredients for the fat and flour as compared to the standard recipe. They will

experience preparing a pie crust.

Instructional Procedures

Hand out to the students the Home Assignment to prepare a Pie of their choice at home. It will be due the day of the test. (Because I require the students to bring to class a pie plate and fruit to thicken when we prepare an individualized double crusted pie in class, I make the Home assignment for Pies as extra credit or optional) They can prepare their pie with any type of crust.

Give a written assignment from the classroom textbook on pies to introduce the unit to the students. I have them read Chapter 29 on Pies in The World of Food pages 529 - 542 and answer the six review questions and questions 8 - 12. They can work on this assignment after they have cleaned up their unit and are ready to evaluate their pastry experiment.

Hand out the Pie Experiment. Read it aloud and explain that the students are going to prepare this recipe according to the directions using a different variation. All of the pie crusts will be compared to the standard recipe.

Assign a different recipe to each unit. As they are preparing their recipe, walk around and take notes on how well they are following the directions.

The pie crusts will be eaten and evaluated with no filling so they can taste the actual crust and compare the flavor of the fat and note its flakiness.

After all of the pie crusts have been baked, let them cool for a few minutes. Place them on a cooling rack in the middle of their table with a table knife.

Each student will then walk around and sample each of the pie crusts and compare the appearance, texture and flavor of each and complete their chart. They will then write 2 - 3 paragraphs on what they learned from this experiment. They will be turned in before they leave to be corrected.

If there is any extra pie crust left, I will let them sprinkle sugar and cinnamon on it and eat the rest.

The students must clean up their unit before leaving. Return pie plates, pastry cloths and sockinets in their proper place or to be laundered.

Authors

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