



NEWCOMB HIGH SCHOOL

"HOME OF THE SKYHAWKS"

Advanced Food – Baking

Teacher: Ronalyn Manores



Topic: YEAST DOUGH BASICS

Sub-Topic:

- Types of Yeast Doughs

References:

- Culinary Essentials, Johnson & Wales
- Oh Yum with Anna Olson, YouTube Channel
- Google.com/search (for photos)

Standard:

8.4.3 Analyze food, equipment and supplies needed.

Objectives:

- Distinguish various types of yeast doughs
- Identify products made from regular yeast doughs and rolled-in flat yeast





F A M I L I A R I Z E

Direction: Read each description. Rearrange the jumble letters to reveal the hidden words. Then, use each word in a sentence.

1. **ANEL UGOHD** - a dough low in fat and sugar

Answer: _____

Sentence: _____

2. **SENDE** - closely compacted in substance

Answer: _____

Sentence: _____

3. **GENLUT** - a substance present in cereal grains, especially wheat, that is responsible for the elastic texture of dough

Answer: _____

Sentence: _____

4. **BMRUC** - a small fragment of bread, cake, or cracker

Answer: _____

Sentence: _____

5. **TICSEAL** - The property of dough to retract to its initial position after being stretched

Answer: _____

Sentence: _____



AQUIRE KNOWLEDGE

Types of Yeast Dough

1. Regular Yeast Doughs

Yeast products are generally classified according to the types of dough used to produce them. Regular yeast doughs are prepared by combining yeast with the other ingredients into one mixture.

The three most common regular yeast doughs used in food service operations are:

a. Hard-Lean Dough



A hard-lean dough consists of 0-1% fat and sugar. They are the most basic yeast doughs. They are often made solely from flour, water, salt and yeast. Hard lean doughs yield products with relatively dry, chewy crumb and hard crust. The crumb is in the internal texture of a bread or roll. The crust is the outer surface of a bread or roll.

Fats make a hard-lean dough easier to handle, but they also soften the crumb. In commercial baking operations, chemical dough conditioners such as chlorine dioxide are sometimes used. These conditioners may be added to strengthen the glutens that give hard lean-dough products their dense structure

Similar to traditional hard lean doughs are whole-grain breads, rye breads, and sourdoughs. Their textures are much denser because of the coarser, heavier flours and hotter baking methods used. The crumbs is chewer and the crust is usually darker and crispier.

Hard lean doughs are stiff, dry and more difficult to work with than soft medium doughs. Therefore, some bakers add oil or oil to make them richer. Whole eggs may be added for color, fat or additional moisture.



AQUIRE KNOWLEDGE

b. Soft Medium Doughs



Soft medium doughs produce items which a soft crumb and crust. The percentage of fat and sugar in these doughs is 6-9%. Soft medium dough is elastic and tears easily.

Yeast products made from soft medium dough include Pullman Bread. It is white or wheat sandwich bread that is made into squared-loaves. These loaves get their shape from baking in a loaf pan that's enclosed on all sides. Other soft medium dough products include dinner rolls such as Cloverleaf and Parker House Rolls

c. Sweet Rich Doughs



A sweet rich dough incorporates up to 25% of both fat and sugar. Because sweet rich doughs use such large amounts of fat and sugar, their structure is soft and heavy. The high gluten content of bread flour helps sweet rich dough support the additional fat and sugar.

Most sweet rich dough are moist and soft. In working with a sweet rich dough, you may be tempted to add more flour to make the dough easier handle. However, adding flour will toughen the final product. Use only a light dusting of flour on your hands and work surfaces when working with sweet rich doughs.

Many sweet rich dough products are famous for their golden crumb and brown crust. The traditional means of achieving this golden color is to add numerous eggs to the dough. However, the egg can break down the gluten and make the dough too heavy. Many commercial kitchens use yellow food coloring to enhance the color of the dough. You can also add shortening to increase the dough's richness. Some examples of sweet rich dough products are yeast raised coffee cakes, cinnamon buns and doughnuts.



AQUIRE KNOWLEDGE

2. Rolled-In Fat Yeast Doughs

When making a rolled-in fat yeast dough, combine the fat into the dough through a rolling and folding action. This process yields a dough made a many thin, alternating layers of fat and dough. As the dough bakes, the heated fat layers release moisture in the form of steam. The steam becomes trapped between the layers of dough, pushing them apart and lifting them. The finished products of rolled-in fat yeast dough are notable for their rich, flaky texture.

Rolled-in fat yeast doughs traditionally use butter for the fat layers. Butter adds a rich flavor and aroma, but it is difficult to handle while rolling and folding. Warm butter is too soft to roll, and cold butter cracks when folded. Instead, you may want to use other high-moisture fats, such as margarine or shortening. They may be substituted partially or completely for the butter. This will improve handling ability and lower costs.

Rolled-in fat yeast doughs also differ from regular yeast doughs in gluten development. Gluten develops during folding and rolling, so little kneading is required with rolled-in fat yeast doughs. Overdeveloping the gluten will make the finished product tough and chewy. Large food service operations often use sheeters to ensure consistent rolled-in fat yeast dough production.

Two popular kinds of rolled-in fat yeast dough products are croissants and Danish pastries.

a. Croissants

Croissants are crescent shaped flaky rolls. Croissant dough is a soft mixture of bread flour, yeast, cold milk, salt, butter and a little sugar. You can add dry milk solids and cold water instead of milk, the cold water or milk slows the leavening action of the yeast. Eggs are not part of the traditional formula, but can be added for additional richness. Butter or another high-moisture fat equal to 25-50% of the weight of the dough is rolled in.



A fresh baked croissant should be light golden brown. It should have a flaky, layered texture and an open grain or crumb. Croissant dough can be shaped into traditional crescents or the tighter half circles that Swiss and German bakers call gipfels.



AQUIRE KNOWLEDGE

b. Danish Pastry

Danish pastry dough is sweeter and richer than croissant dough. Danish pastry is usually eaten as a breakfast or dessert item. Unlike croissant dough, Danish pastry dough is rich in eggs. It can also include milk.

Danish pastry is also softer, flakier and more tender than croissants. These characteristics, along with a more intense flavor, are due to the Danish pastry's higher percentage of rolled-in fat. This percentage can range from 10-50%.





CHECK FOR UNDERSTANDING

A. Complete the table by describe the three common regular dough based on the attributes on the first column

Attributes	Hard Lean Doughs	Soft Medium doughs	Sweet Rich Dough
Fat & Sugar Content			
Texture & Structure			
Sample Bake Products			





CHECK FOR UNDERSTANDING

B. H-Chart. Compare and contrast the two popular kinds of rolled-in fat yeast dough.

Croissant

[illegible]

Danish Pastry

[illegible]

Both


[illegible]



CCHECK FOR UNDERSTANDING

C. Essay

Imagine that you work in a small bakery. The bakery's croissants keep turning out heavy and chewy. What three factors might be responsible for this? Offer a solution for each factor.

A yellow smiley face with two black dots for eyes and a curved line for a smile. It is wearing a white chef's hat and a white bow tie. The smiley face is positioned in the bottom right corner of the page, partially overlapping the lined area.



S K I L L S E H A N C E M E N T

Directions:

1. Hit each link.
2. Watch the videos
3. Identify the type of dough used
4. Discuss the ingredients and procedures of each recipe.
5. Optional: If you have available ingredients, choose one recipe and try to do it with your family. Take photos of your output and discuss your family experience in doing.

Parker House Rolls

<https://www.youtube.com/watch?v=rE3MkS5ck54>

Danish Dough Recipe

<https://www.youtube.com/watch?v=oKpFVzSbQel>

Cinnamon Bun

https://www.youtube.com/watch?v=2yrKaAqZ_kc

Puff Pastry Dough

https://www.youtube.com/watch?v=g-dF_j3AVTw

Note:

- Packet 1
Topic: Yeast Dough – Ingredients
- Packet 2
Topic: Types of Yeast Dough
- Due: April 10, 2020, 5:00pm

Make sure to send your assignments on or before the given time.

for your questions or concerns:

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