

# Making Bread and Butter

A Grade 4-8 Lesson Plan

## Overview:

Grade 4 to 8 students will make bread and learn about where flour comes from. They will explore the role of yeast in bread-making and make butter by hand.

**Estimated time:** 2 hours

**Food Costs:** \$20-25

## Learning Outcomes:

By the end of the lesson, the students will:

- Understand where flour comes from.
- Be able to make bread.
- Understand the role of yeast in bread-making.
- Be able to make butter.

## Curriculum Links:

This lesson supports Big Ideas and Learning Standards in the Physical and Health Education BC curriculum and can also link to other subject areas.



## Materials (for 4 groups):

### 1. Yeast Experiment

#### Ingredients for yeast experiment:

- 4 spoonfuls yeast (any type),
- 4 spoonfuls granulated sugar
- 500 mL warm water

#### Supplies for yeast experiment:

- 4 small bowls

### 2. Bread

#### Ingredients for making bread:

- 8 x 1 cup (250mL) all-purpose flour
- (8 cups, 2000mL)
- 4 x 1 package (2.25 tsp, 11.25mL) rapid rise yeast\* (9 tsp, 45mL)
- 4 x 3 Tbsp (45 mL) sugar (12 tbsp, 180mL)
- 4 x 3 Tbsp (45 mL) skim milk powder (12 tbsp, 180mL) (Omit if any students have a dairy allergy)
- 4 x 1 tsp salt (5mL) (4 tsp, 20mL)
- 4 x 1 cup (250 mL) warm water (4 cups, 1000mL)
- 4 x 3 Tbsp (45 mL) vegetable oil (12 tbsp, 180mL)
- 4 x 1 cup (250 mL) whole wheat flour (4 cups, 1000mL)

\*do not substitute with traditional yeast

#### Supplies for making bread:

- 4 copies of the recipe, "Bread in a Bag" (see page \_\_)
- 4 regular-sized muffin tins (12's)
- 4 250 mL dry measuring cups
- 4 250 mL wet measuring cups
- 4 sets of measuring spoons
- 4 large resealable plastic bags
- 4 twist ties
- 4 large tea towels
- Napkins, for serving

### 3. Discussion

#### Supplies for discussion:

- Books or pictures of wheat growing and of different varieties of bread
- Samples of grains in different forms (e.g. wheat berries, wheat flakes, flour, oat groats, rolled oats, cheerios). Place each sample in a small container or resealable plastic bag for ease of use

### 4. Butter

#### Ingredients for making butter:

- 1 cup (250mL) liquid whipping cream
- 4 x Pinch of salt

#### Supplies for making butter:

- 4 x 250 mL glass jars with tight-fitting lids
- Plastic knives, for spreading



## Procedure:

### 1. Preparation

- Gather all ingredients and supplies needed. If possible, gather bulk ingredients rather than measured amounts in order to get students involved in the measuring and baking process.
- Read through the complete lesson plan and determine resources/tools you will use to introduce the food items. Pull these up on your computer/projector if applicable

### 2. Introduction to bread

- Explain to students that they will be exploring bread today and getting to make some! Discuss the key ingredients involved as a class (flour, yeast, sugar, warm water, salt). You can discuss where these ingredients come from, how they are grown or made, and/or what their role is in bread making. Let your students guide the discussion with what they know, you can go into more detail during a later discussion.
- It can be fun to use additional resources or activities to help your students learn more about these ingredients and the process of making bread.

- Watch [BC at the Table: Grains](#) to learn more about grains and how they are grown in BC.
- Explore [Grow BC's Grain Story](#)
- Either individually or in groups, have students research types of breads from other countries and how they are made. Once complete, students can present what they found to their fellow classmates.

- Introduce yeast as the secret ingredient in bread-making. Explain what yeast is and how it works.
  - Yeast is a tiny organism, neither plant nor animal, but in a special category called fungi—the same group that mushrooms belong to.
  - Yeast needs sugar and a warm environment to grow which is why we add sugar to our bread and use warm water instead of cold!
  - You can tell it's growing when you see bubbles. The bubbles are a gas called carbon dioxide that makes bread rise.

### 3. Conduct yeast experiment

- Gather your materials for the yeast experiment.
- Explain to students that as we discussed, yeast is the secret ingredient in bread making. It helps the bread rise and makes it nice and fluffy when cooked. Ask a student to place a spoonful of yeast in the small bowl.
- Remind students that in order to grow, yeast needs a warm environment and sugar. Ask a student to add a spoonful of sugar and warm water to the bowl and stir.
  - Explain that sugar is food for the yeast and the warm water provides a warm environment for the yeast to activate and grow.
- Ask students to observe what happens inside the bowl as they proceed with bread-making.

Note: If no bubbles start to form within 3-4 minutes, the yeast might be dead and needs to be replaced



#### 4. Make bread

- Split students into 4 groups. Ideal group sizes are between 4-6 students, if your class is smaller/larger than this we suggest adapting the number of groups accordingly
- Follow the instructions for the Bread in a Bag recipe, found on page 6.

#### 5. Discussion

- While the bread rises and bakes in the oven, gather students into a big group for discussion
- Ask students if they know where flour comes from.
  - Flour is made from wheat. Wheat is harvested on the farm and milled into fine powder.
  - When all parts of a wheat kernel are milled into flour, it is considered whole grain.
  - All purpose flour is made from wheat from which the outer part (wheat bran) and germ are removed
- Show pictures of wheat and pass around examples of grains in different forms (wheat berries, wheat flakes, flour, oat groats, rolled oats, cheerios). Encourage students to see and touch the different grain examples.
- Discuss results of yeast experiment.

#### 6. Make butter

- Hand out 1 empty glass jar to each group.
- Pour whipping cream into a glass jar and seal tightly (no more than 1/3 full, around 60mL/jar).
- Ask students to take turns shaking vigorously until solids form (about 10-15 minutes). While students are shaking the jar, discuss as a class the changes they notice.
  - When whipping cream is shaken vigorously, the fat globules will clump together into a ball of solid fat—butter! The remaining liquid is called buttermilk and contains many nutrients. It can be used to make certain cheeses, pancakes, or baked goods like cakes or brownies.



## 7. Tasting and wrap up

- Allow students to help themselves to the bread they have made. They may spread the butter on the bread if they choose.

Remember, when talking about food and providing tasting opportunities, a neutral approach is encouraged. This allows students to use their natural curiosity to expand their experiences with food.

Rather than pressuring students to take some of the bread or to add butter, let them decide whether and how much to eat of the foods offered to them. If needed, remind them to be polite or save enough for their classmates but trust your students to do their own eating job.

When you let a child be in charge of whether to eat and how much to eat, you allow them to regulate their own appetite and learn to accept new food when they are ready.

- Sit down together as a group to eat. Review what the students made today.

If you want more discussion topic options, we recommend checking out these [Mealtime Conversation Cards](#) from Island Health to get the conversation started!

### More information for Teachers

Refer to [Kitchen Equipment for your Classroom](#) for more preparation and food safety tips. For additional food safety information, visit [HealthLink BC](#).

Want to do more nutrition education with your class? [Explore our other lesson plans](#) or check out our [Food Explorers program](#).



# Bread in a Bag Recipe

## Ingredients:

- 1 cup (250 mL) all-purpose flour
- 1 package (2.25 tsp) rapid rise yeast
- 3 Tbsp (45 mL) sugar
- 3 Tbsp (45 mL) skim milk powder (If any students have a dairy allergy, omit)
- 1 tsp salt (5mL)
- 1 cup (250 mL) warm water
- 3 Tbsp (45 mL) vegetable oil
- 1 cup (250 mL) whole wheat flour
- about 1 cup (250 mL) additional all-purpose flour

## Equipment:

- Measuring cups and spoons
- Resealable plastic bag
- Twist tie
- Clean cloth (e.g. tea towel)
- Muffin tin
- Oven mitts
- Oven

## Procedure:

1. Wash your hands.
2. Add the first cup of all-purpose flour, yeast, sugar, skim milk powder and salt to a resealable plastic bag. Seal.
3. Shake and work bag with fingers to blend ingredients.
4. Open bag and add water and vegetable oil. Seal.
5. Mix again by working the bag with your fingers until the ingredients are blended in.
6. Open the bag and add the whole wheat flour and enough all-purpose flour to make a stiff dough. You'll need about a full cup of all-purpose flour. Start with about 3/4 cup.
7. Squeeze out the air from the bag and seal with a twist tie near the top. Work the dough by squeezing it with your fingers. Add a little more flour if needed, and work it in until the dough starts to pull away from the bag.
8. Dust your hands with flour then remove the dough from the bag. Place on a clean work surface that has been dusted with flour.
9. To knead the dough, use your fingers to fold the dough in half. Use the heel of your hand to press and push the dough. Turn the dough and repeat. Do this for at least five minutes until the dough looks smooth and elastic.
10. Grease the muffin tin.
11. Divide the dough into 48 equal pieces. Roll each piece into a ball. Place 4 balls into each cup of the muffin tin.
12. Cover and let rise for 10–15 minutes, about the length of recess. The dough should double in size.
13. Bake at 400° F (200° C) for 10–15 minutes or until done.

Note: Adapted from Fleischmann's Yeast, ACH Food Companies, Inc.

