

Let's Bake Quick Breads



Name _____

Age *(as of January 1 of current year)* _____

County _____

Club name _____

Advisor _____



THE OHIO STATE UNIVERSITY

COLLEGE OF FOOD, AGRICULTURAL,
AND ENVIRONMENTAL SCIENCES



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Notes to the Project Helper

Congratulations! A 4-H member has asked you to serve as a project helper. You may be a parent, relative, project leader, friend, club advisor, or another individual important in the 4-H member's life. Your duties begin with helping the youth create and carry out a project plan, as outlined in the Member Project Guide. This is followed by helping the youth focus on each activity, providing support and feedback, and determining what was done well, what could have been done differently, and where to go next.



As a project helper, it is up to you to encourage, guide and assist the 4-H member. How you choose to be involved helps to shape the 4-H member's life skills and knowledge of the importance of food and nutrition.

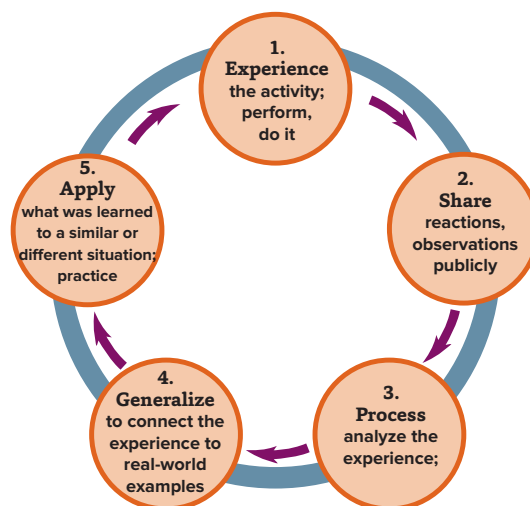
Your Role as Project Helper

- Guide the youth and provide support in setting goals and completing this project.
- Encourage the youth to apply knowledge from this project book.
- Serve as a resource person.
- Encourage the youth to go beyond the scope of this 4-H project book to learn more about food and nutrition.



What You Should Know About Experiential Learning

The information and activities in this book are arranged in a unique, experiential fashion (see model). In this way, youth are introduced to a particular practice, idea, or piece of information through an opening (1) experience. The results of the activity are then recorded in the accompanying pages. Youth then take the opportunity to (2) share what they did with their project helper, (3) process the experience through a series of questions that allow the learner to (4) generalize and (5) apply the new knowledge and skill.



Pfeiffer, J.W. and J.E. Jones, Reference Guide to Handbooks and Annuals. © 1983 John Wiley & Sons, Inc. Reprinted with permission of John Wiley & Sons, Inc.

What You Can Do

- Review the learning outcomes (project skill, life skill, educational standard, and success indicator) for each activity to understand the learning taking place. See page 40 for a summary of the learning outcomes.
- Become familiar with each activity and the related background information. Stay ahead of the learner by trying out activities beforehand.
- Begin the project by helping the learner establish a plan for the project. This is accomplished by reviewing the Member Project Guide.
- After each activity, conduct a debriefing session that allows the learner to answer the review questions and share results. This important step improves understanding from an experiential learning perspective.
- Help the learner celebrate what was done well and to see what could be done differently. Allow the learner to become better at assessing his or her own work.
- In the Member Project Guide, date and initial the activities that have been completed.



Member Project Guide

Welcome to *Let's Bake Quick Breads*! This intermediate-level food and nutrition book is designed for members who want to expand their baking skills by making tasty waffles, pancakes, quick breads, muffins, and corn bread. You also will learn why grains are important for health, how to bake gluten-free breads, and how to adjust a quick bread recipe for a more healthful result.

Check your county's project guidelines (if any) for completion requirements in addition to the ones below, especially if you plan to prepare an exhibit for the fair.

Project Guidelines

Step 1: Complete **all eight** activities.

Step 2: Take part in **at least two** learning experiences.

Step 3: Become involved in **at least two** leadership/citizenship activities.

Step 4: Complete a project review.



Step 1: Project Activities

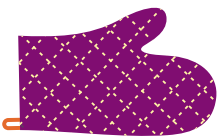
Complete **all eight activities**. The More Challenges activities are optional. When you begin an activity, jot down the date you start it. When you finish an activity, review your work with your project helper. Then ask your project helper to initial and date your accomplishment.

Activity	Date Completed	Project Helper Initials
1: What Makes Grains Great?		
Whole Wheat Waffles		
2: Digging Into Wheat		
Buckwheat Pancakes		
3: Putting It All Together		
Pear and Walnut Muffins		
4: Mixing It Up		
Muffins Your Way		
5: Equipment Experiment		
Southern Corn Bread		
6: Gluten-Free Baking		
Pumpkin Bread		
7: Tweaking Recipes for Your Health		
Strawberry Bread		
8: Careers in the Kitchen		

Activity 1:

What Makes Grains Great?

Most everyone enjoys food made with grains such as rice, wheat, oats, and corn every day. Cereal at breakfast, bread for sandwiches, granola bars as a snack, and popcorn during a movie. Grains play a prominent role in MyPlate, the United States Department of Agriculture's nutritional guidelines. Let's find out why!



Words in **bold** throughout this book are defined in the glossary.

What to Do

Make a list of five foods you like that are made with grains. Next, look at the food's list of ingredients on the packaging and find which grain or flour is listed. Write what you found in the second column. In the last column, fill in your guess of whether the grain is a refined (or enriched) grain or a whole grain.

Food You Like Made with Grains	Grain Listed on Food Label	Refined (Enriched), Whole Grain or Both?
<i>Example: Oatmeal</i>	<i>Oats</i>	<i>Whole grain</i>

Learning Outcomes

Project skill

Recognizing foods with whole grains and refined grains

Life skill

Making healthy life choices

Educational standard

NHES 3-5-2 Locate resources from home, school, and community that provide valid health information

Success indicator

Identifies sources of whole grains and refined grains

Activity 1

Talking It Over

SHARE How did you decide if the foods listed in your table were made with whole grains or refined grains?

REFLECT Do you think the grains you eat are mostly whole grain or made with refined grains?

GENERALIZE Name a couple of whole-grain foods that could replace some of the refined-grain foods in your diet.

APPLY Are there other small ways for you to make more healthful choices? Identify and describe at least one.



More Challenges

Pre-packaged foods can be expensive and fattening. Learning to make your own healthful substitutes saves money and helps you stay healthy. Try re-creating a store-bought baked good in your kitchen. You'll save money and usually end up with a better-tasting result. Let your club members in on any successes!

Background

MyPlate was presented in 2011 as a way to easily guide Americans to **healthful** food choices. The ChooseMyPlate.gov icon is a simple symbol reminding us of the types of foods to target and the suggested meal portions for each food group.

The Grains group has two sub-groups, refined grains and whole grains. Refined grains are the result of putting wheat kernels through a mill to remove the bran and germ, leaving only the endosperm. Because of this process, refined grains have a finer texture and a longer shelf life, but no dietary fiber or iron, and few vitamins. As a result, most refined grains are also enriched. Examples include white bread, flour tortillas, white rice, and most pretzels, crackers, and noodles.

Whole wheat contains the entire wheat kernel: the bran, the germ, and the endosperm. A lot of nutrition is packed in the bran and germ. Whole grains help us maintain important body systems such as building bones and keeping our digestive tract healthy. Because of the higher nutrition in whole grains, the USDA recommends making half of your grains whole. Whole grains offer a wide variety of food choices from buckwheat pancakes to brown rice-flour quick breads to muffins made with millet. Other examples include oatmeal, popcorn, whole wheat tortillas, and whole-grain cereal. Start experimenting with whole grains to add nutritious, new foods to your family's meals!



Activity 1

Did you know?

China and India produce more wheat than the United States, but the U.S. is the number one exporter of wheat.

Recipe

Whole Wheat Waffles

2 eggs
1¾ cups milk
¼ cup vegetable oil
1 tablespoon honey
½ teaspoon vanilla extract
½ teaspoon ground cinnamon
1½ cups whole wheat flour
¼ teaspoon baking soda
2 teaspoons baking powder
⅛ teaspoon salt
Warmed maple syrup
Fresh fruit

1. Preheat waffle iron.
2. In a large mixing bowl whisk together eggs, milk, oil, honey, vanilla extract, and cinnamon until well combined.
3. Add in the flour, baking soda, baking powder, and salt. Whisk just until any large lumps disappear.
4. When waffle iron is hot, ladle some batter—usually ½ to 1 cup—onto the center of the iron. The exact amount depends on your waffle iron. Follow the manufacturer's directions for how much batter to use and for how long to cook each waffle.
5. Keep waffles warm until you cook all the batter. Serve with maple syrup and fruit.

Makes 5 waffles.

Adapted from 100daysofrealfood.com



Nutrition Facts

Serving size: 1 waffle (149g)
Servings Per Recipe 1

Amount Per Serving

Calories 210 Cal from Fat 40

% Daily Value*	
Total Fat 4.5g	8%
Saturated Fat 1.5g	8%
Trans Fats 0g	
Cholesterol 80mg	25%
Sodium 380mg	15%
Total Carbohydrate 35g	10%
Dietary Fiber 4g	15%
Sugars 8g	
Protein 10g	
Vitamin A 2%	Vitamin C 0%
Calcium 25%	Iron 10%

*Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.

Activity 1

Notes for Next Time

Did the recipe you chose turn out the way you expected?

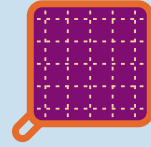
☐ Yes ☐ No

Be as specific as you can be when you answer these questions. Consider the food's color, texture, taste, temperature, seasoning, appearance, and anything else that affects its overall appeal.

What do you like about this recipe?

What do you dislike about this recipe?

What, if anything, would you do differently next time you make this recipe?



Baker's Tip

Most new waffle irons are sold with a non-stick coating that allows waffles to release from the iron without adding butter or oil to its surface prior to cooking. Other features can include different temperature settings for light, medium and dark waffles (just like toasters), an off/on indicator light, and an automatic shut-off feature.

Resource

Find great tips about how to eat well at **choosemyplate.gov/healthy-eating-tips/ten-tips.html**.

Summary

Summary of Learning Outcomes

Activity	Project Skill	Life Skill	Education Standard*	Success Indicator
1. What Makes Grains Great?	Recognizing foods with whole grains and refined grains	Making healthy life choices	NHES 3-5-2 Locate resources from home, school, and community that provide valid health information.	Identifies sources of whole grains and refined grains
2. Digging into Wheat	Identifying the parts of a wheat kernel	Visualizing information	NGSS 4-LS1-1 Construct an argument that plants and animals have internal and external structures that function to support survival, growth, behavior, and reproduction.	Determines which nutrients come from which parts of wheat
3. Putting it All Together	Recognizing ingredients needed to make quick breads	Reading ingredients labels	NGSS 5-PS1-3 Make observations and measurements to identify materials based on their properties.	Identifies purpose of each quick bread ingredient
4. Mixing It Up	Comparing muffins made with different lengths of mixing times	Completing a task	NGSS 5-PS1-4 Conduct an investigation to determine whether the mixing of two or more substances results in new substances.	Identifies reasoning behind quick bread recipe instructions
5. Equipment Experiment	Comparing one recipe made in two different pans	Completing a task	NGSS 4-PS3-2 Make observations to provide evidence that energy can be transferred from place to place by sound, light, heat, and electrical currents.	Determines differences in corn bread made in two types of pans
6. Gluten-Free Baking	Baking quick breads with the same recipe using two different kinds of flour	Completing a task	NHES 7-8-2 Demonstrate healthy practices and behaviors that will maintain or improve the health of self and others.	Compares which bread recipe produced the best results
7. Tweaking Recipes for Your Health	Altering recipes to improve nutrition	Making healthy lifestyle choices	NHES 5-8-6 Choose healthy alternatives over unhealthy alternatives when making a decision.	Compares breads made with a standard recipe and one with that substitutes healthier ingredients
8. Careers in the Kitchen	Interviewing someone in the food industry	Processing information	NHES 3-8-1 Analyze the validity of health information, products, and services	Identifies pros and cons of working in food industry

* The educational standards cited here are from the National Health Education Standards (NHES) from the Centers for Disease Control and Prevention's School Health Education Resources (SHER), and the Next Generation Science Standards. These are available in their entirety at cdc.gov/healthyyouth/sher/standards/ and nextgenscience.org, respectively.