



Fantastic Foods

Note to Project Helper

Congratulations on having a young person ask you to be their helper. Your role as a project helper is very important to the young person's total educational experience. Not only will you provide encouragement and recognition; you will also be the key person with whom the young person shares each of the experiences in this 4-H activity guide.

The Foods curriculum series is designed to help youth have fun in the kitchen as they learn basic food preparation skills, prepare different foods, do fun experiments, and go on fact-finding missions. These educational materials have been created with a focus on healthy food selection, smart food purchasing, food safety and science, food preparation, food preservation, and careers in the food industry. The design emphasizes teaching young people the importance of balance with their food choices as they are building healthy food habits that will carry them to adulthood.

Food is meant to be enjoyed, but it is also important to find a balance of regularly making healthy choices and occasionally indulging in a treat. The recipes that are included were developed with this concept in mind. Youth learn to prepare recipes that encourage increased fruit, vegetable, low-fat dairy, lean protein, and whole grain consumption. They will also be challenged to increase the nutritional value of recipes by making healthy ingredient choices.

Five pieces are available in the Foods curriculum. There are four activity guides—Fantastic Foods, Tasty Tidbits, You're the Chef, and Foodworks. These guides have been designed to be developmentally appropriate for grades 3–4, 5–6, 7–9, and 10–12, respectively, but may be used by youth in any grade based on their skills and expertise. The fifth piece, the Project Helper Guide, provides you with additional background and tips on helping youth through the activities in their guide. The Project Helper Guide is available online as a free downloadable item.



Contents

Introduction to Level A

- The Experiential Learning Model* 4
- Having Fun with Fantastic Foods* 5
- Everyone Needs Nutrients* 6
- Putting MyPlate Together* 8
- How to Measure* 10
- Kitchen Safety* 11
- How to Read a Recipe*12

Examining Germs.....14

Danger Zone16

Fuzzies on My Bread 18

Mama Mia Pizza20

Bone Up on Calcium.....22

Fruit Kabobs24

Snackin’ Power26

Pancakes, Anyone?.....28

Classic Chocolate Chip Cookies.....30

Fruit in Muffins32

Micro Stuffed Potatoes.....34

Decoding the Nutrition Facts Label36

Juice or Fruit Drink38

Making Brownie Cents.....40

Tune Into Advertising.....42

You Be the Judge.....44

Frosty Freezer Fruit.....46

Fruit Granita.....48

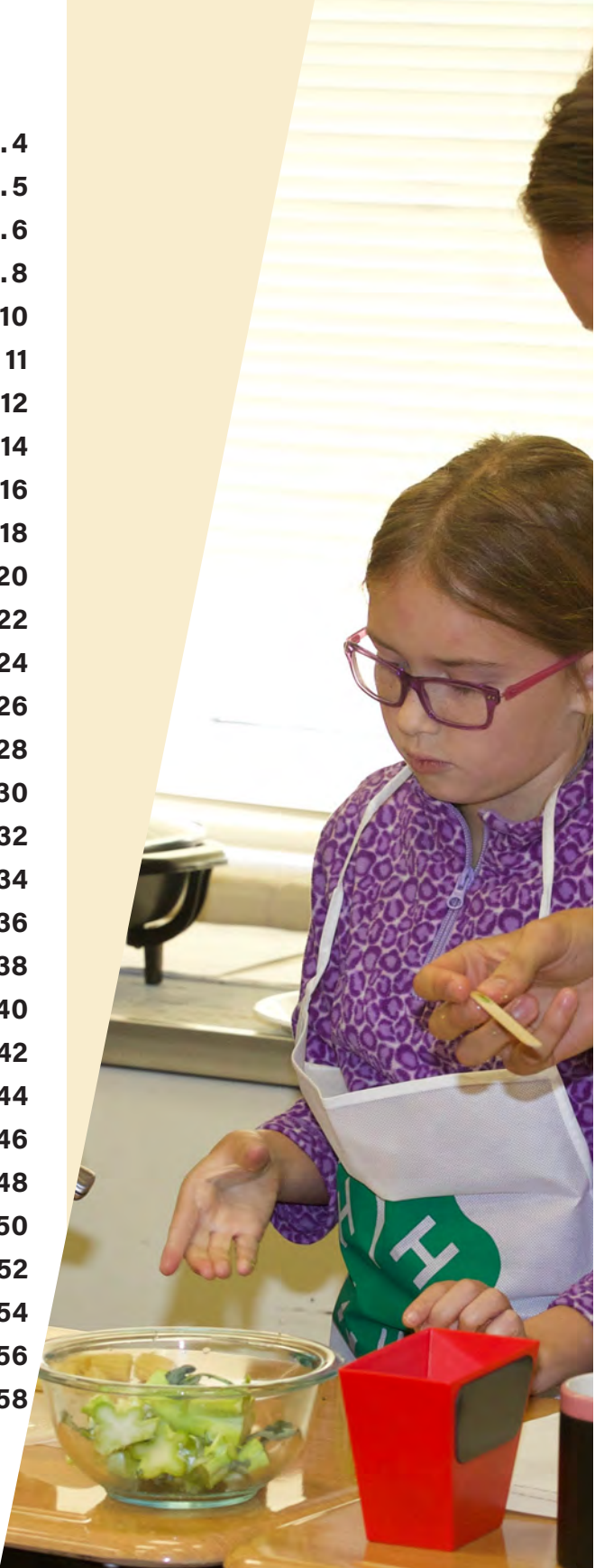
Saving Leftovers50

Farm to Table.....52

Eating in Season54

Food Industry Careers.....56

Glossary58



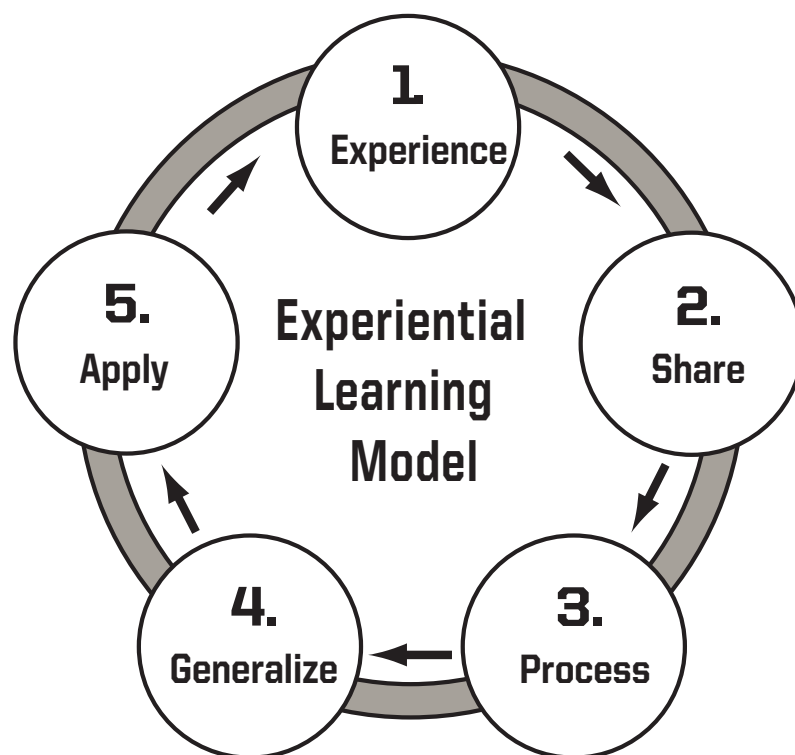
The Experiential Learning Model

Acknowledgments

The Foods curriculum series activity guides were written by **Bethany Daugherty, MS, RDN, LD** and **Angie Frost, MS, RD, LD**

Project coordination was managed by **Renée K. McKee**, Assistant Director - Purdue Extension, State 4-H Program Leader

Editor: **Nancy Alexander**, Cicero, Indiana



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

The experiential model and its five steps are used in each activity in this guide as a means to help youth gain the most from the learning experiences.

The five steps encourage youth to try to do the activity before being told or shown how (experience). As the helper, you will want to help the youth describe what they experience and their reaction (share). You can use the questions listed at the end of the activity to help the youth:

Discuss what was most important about what they did (process);

- Relate the life skill practiced to their own everyday experiences (generalize); and
- Share how they will use the life skill and project skill in other parts of their lives (apply).



Having Fun with Fantastic Foods

Are you ready?

Are you ready to do fun experiments, prepare delicious recipes, and go on fact-finding missions? That's what Fantastic Foods is about. You'll have fun learning about different ingredients in food, healthy eating, and food safety.

Your project guide walks you through a variety of activities. As you do the activities, be sure to write the things you've learned on the record sheet in the back of the manual.

Your project helper

Your project helper is important to your having a good experience learning about foods. This person might be your project leader or advisor, neighbor, family member, friend, or anyone willing to work with you to complete your activities. Involve your helper as you work with each activity and answer the questions. This adult is there to back you up and help you be successful.

Be sure to ask an adult before turning on the stove to cook or bake.

Interactive Demonstrations

An interactive demonstration is a fun way to share what you have learned with others. The key is getting your audience involved in doing what you are doing, not just showing them. You can give an interactive demonstration at a 4-H club meeting or anywhere a lot of people gather, like your school or a county or state fair.

You can choose almost any topic you find in this Fantastic Foods project guide or another topic of interest to you. Here are some questions to ask when choosing a topic:

- Is it something that can be done in three to five minutes?
- Is it something other people might like to learn about?
- Is there something hands-on for the audience to do?
- Can the supplies for the hands-on activity be used over and over again, or do they have to be replaced every time? Having to replace them adds to the cost.

Your demonstration should last about three to five minutes, and you need to be able to do it over and over again with different people. You should have a conversation with the people you are demonstrating to. Your goal is to involve the audience. You can do this by having them do what you are doing, play a game, answer questions, or do a hands-on activity. Some examples: how to use a measuring cup or measuring spoon, or how to find things on a Nutrition Facts label.



Everyone Needs Nutrients

Carbohydrates - Fuel your brain and muscles and give you energy to do things

Vitamin A - Helps you see in the dark

Protein - Builds and repairs muscles and other parts of your body

Calcium - Keeps bones and teeth strong and sturdy, and your heart and other muscles working

Vitamin C - Helps heal cuts and protects from colds and flu

Fat - Gives you some energy and carries some vitamins to where they are needed

Dietary Fiber - Keeps your digestive tract working properly

Iron - Helps your blood carry oxygen to all parts of your body—even your toes!



Nutrients are the special substances that your body gets from the food you eat. Your body needs many different nutrients, because each nutrient does a certain job for your body. You need a lot of some nutrients and not as much of others. Your body is an amazing machine that knows how to handle all the nutrients you give it.

There are five important food groups: fruits, vegetables, grain, protein, and dairy. Each of these food groups contains a different set of nutrients. When you eat foods from every food group every day, you are sure to get all the nutrients your body needs.

Draw a line from each nutrient to the job it does.

GOOD SOURCES OF VITAMIN A:

sweet potatoes, carrots, spinach, kale and other dark green leafy vegetables, and winter squash.

GOOD SOURCES OF VITAMIN C:

bell peppers, broccoli, Brussels sprouts, strawberries, pineapple, oranges, kiwifruit, cantaloupe, and cauliflower.

GOOD SOURCES OF CALCIUM:

dairy products including milk, yogurt, and cheese; dark green leafy vegetables; and salmon.

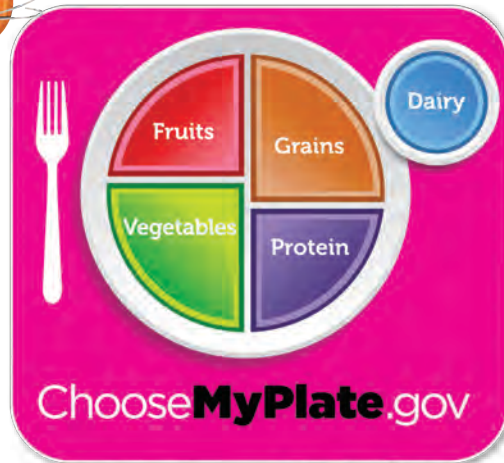
Carbohydrates	▪ Helps you see in the dark
Protein	▪ Builds and repairs muscles and other parts of your body
Fat	▪ Gives you energy to grow, move, and do things
Water	▪ Helps your blood carry oxygen to all parts of your body—even your toes!
Calcium	▪ Gives you some energy and carries some vitamins to where they are needed
Iron	▪ Keeps your digestive system (stomach and intestines) working properly, and fills you up fast
Vitamin A	▪ Helps heal cuts and protect from colds and flu
Vitamin C	▪ Regulates body temperature
Dietary fiber	▪ Keeps bones and teeth strong and sturdy, and keeps heart and other muscles working

Nutrients: How do I get them?

How do you know what foods to eat to get all the nutrients your body needs to stay healthy? There's an easy way to check. Use MyPlate as a guide when choosing foods at meal times. Make half your plate fruits and veggies, choose a lean protein and a whole grain, and add a glass of milk or cup of yogurt, and you'll be on your way to a healthy life. How would you fill MyPlate at breakfast, lunch, and dinner to make sure you get all the nutrients you need?

You can also log on to www.ChooseMyPlate.gov, where you can develop your very own MyPlate recommendations and eat the suggested amounts of each food group every day. On this website, you can also keep track of your food intake and exercise!

SERVING UP MyPlate



Fruits: Fuel Up With Fruits at Meals or Snacks

Pears, watermelon, plums, raisins, berries, and applesauce (without extra sugar) are just a few of the great choices. Make sure your fruit juice is 100% juice.



Vegetables: Color Your Plate With Great- Tasting Veggies

Try to eat more dark-green, red, and orange vegetables, and beans and peas.



Grains: Make at Least Half Your Grains Whole Grains

Choose whole-grain foods, such as whole-wheat bread, oatmeal, whole-wheat tortillas, brown rice, and popcorn, more often.



Protein: Vary Your Protein Foods

Try fish, shellfish, beans, and peas more often. Some tasty ways include a bean burrito, hummus, veggie chili, fish taco, shrimp stir-fry, or grilled salmon.



Dairy: Get Your Calcium-Rich Foods

Choose fat-free or low-fat milk, yogurt, and cheese at meals or snacks. Dairy foods contain calcium for strong bones and healthy teeth.



Keep on Moving!

Kids need at least 60 minutes of physical activity every day. Whether that's running, biking, tossing a ball, or playing tag, every little bit counts. So, run around at recess, jump rope with friends, ride your scooter, or play a sport. It all adds up!



Know Your "Sometimes" Foods

Look out for foods with added sugars or solid fats, such as candy, cake, cookies, chips, ice cream, soda, fruit punch, lemonade, hot dogs, and bacon. They fill you up so that you don't have room for the foods that help you eat smart and play hard. Enjoy these every once in a while, not every day.



Serving Up MyPlate — Grades 3 & 4
U.S. Department of Agriculture • Food and Nutrition Service • September 2012 • FNS-445

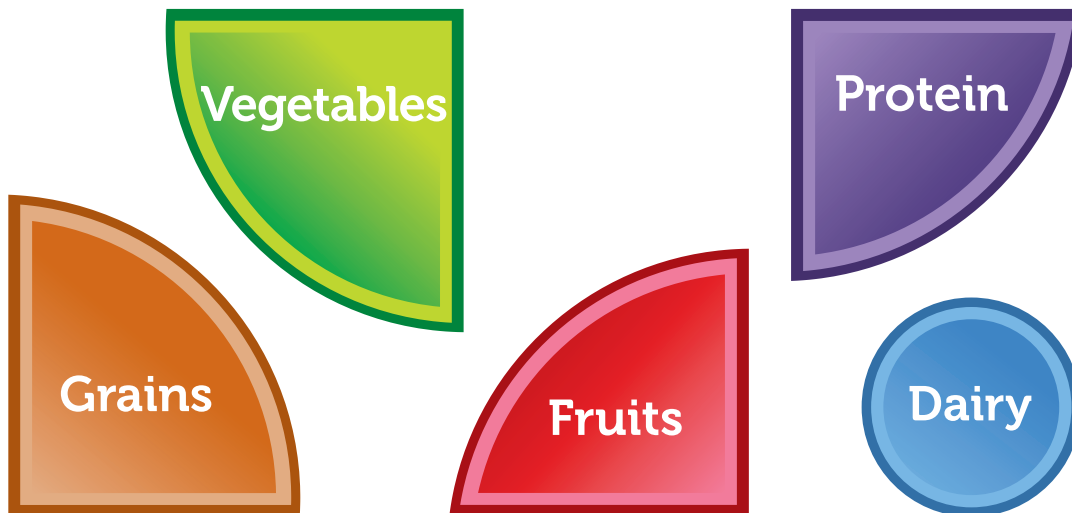
<http://teannutrition.usda.gov>



Credit: All MyPlate material are registered property of the United States Department of Agriculture.

Putting MyPlate Together

MyPlate uses the five food groups as building blocks for a healthy diet. Before you eat, think about what goes on your plate or in your cup or bowl. Use the five food group shapes to build your healthy plate.



How to Measure

Measuring is an important skill to learn, especially when baking. Baking is a science in which exact measurements produce a perfect product. Here are some measuring tips to help you always get the correct amount of ingredients that a recipe requires.

Measure liquids with glass cups that have extra space above the last measuring mark. This extra space is called headspace.

Measure dry ingredients with cups that come in a set of 1 cup, 1/2 cup, 1/3 cup, and 1/4 cup. Metal or glass measuring cups and spoons are better than plastic, which may crack or bend out of shape.

Measuring flour and sugars

Flour

- Lightly stir the flour, then spoon it into a dry measuring cup.
- Pile the flour higher than the top of the cup. Do not shake, tap, or pack the flour down in the cup.
- Use the straight edge of a knife or metal spatula to level off the top.

Note: It is no longer necessary to sift flour, because it is presifted at the mill before packaging.

White sugar

- Spoon sugar into a dry measuring cup higher than the top of the cup.
- Use the straight edge of a knife or metal spatula to level off the top.

Brown sugar

- Break up any lumps by squeezing or rolling the bag the brown sugar is stored in.
- Spoon into a dry measuring cup.
- Pack it down firmly with the back of a spoon, so the brown sugar keeps the shape of the cup when turned over.
- Level with the straight edge of a knife or metal spatula.

Measuring solid and liquid fats

Solid fats

Margarine or butter (sticks)

- Cut using the measuring marks on the wrapper as a guide.

Shortening or margarine in a tub

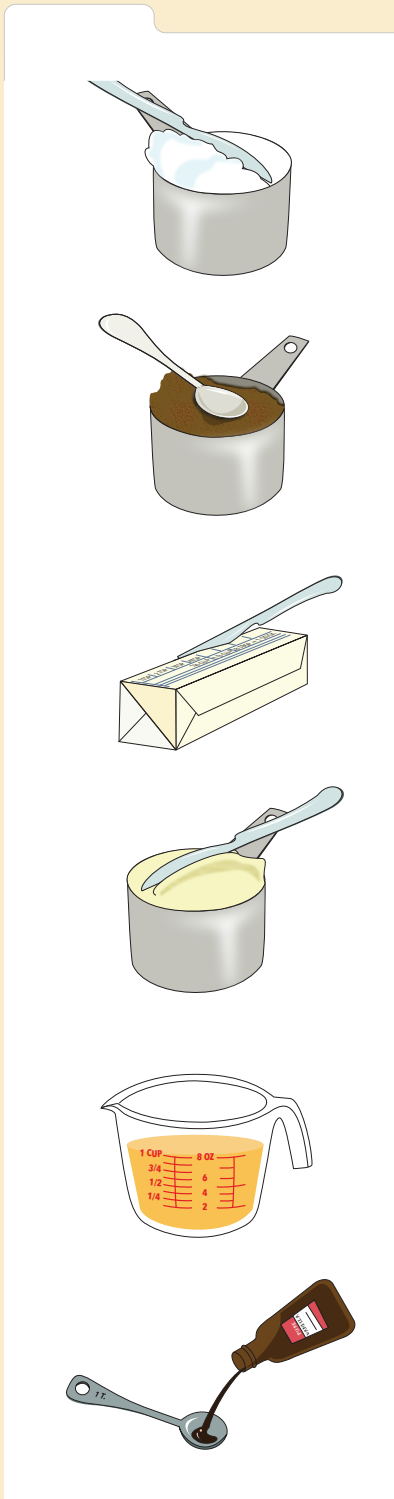
- Pack firmly into a dry measuring cup with a rubber spatula.
- Level with the straight edge of a knife or metal spatula.
- Remove from measuring cup with a rubber spatula.

Measuring liquids

- Place a liquid measuring cup on a flat counter or table.
- Fill to the mark for the amount of liquid your recipe requires.
- Bend down so your eye is level with the measuring cup. Check that the bottom of the liquid line is at the mark for the amount needed.
- Use measuring spoons to measure less than 1/4 cup.
- Use a rubber spatula to remove oil and sticky liquids like molasses, corn syrup, or honey.

Measuring small quantities of liquids, including extracts

- Pour the amount required for the recipe into the right measuring spoon.
- Never measure over the mixing bowl or pan. Hold the spoon over a small cup while pouring into the measuring spoon.





Extension - 4-H Youth
Development



An Equal Access/Equal Opportunity University

purdue.edu/extension

December 2021

Find out more at
THE EDUCATION STORE
edustore.purdue.edu

