



Foodworks

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 D	
The Experiential Learning Model	4
Foodworks for the Future.....	5
Lifetime Nutrition	6
Nutrition Through the Lifecycle	7
Infant and Toddler Nutrition	8
Cooking with Kids	10
Senior Nutrition.....	12
Planning Ahead.....	14
Divide in Two.....	16
Food Budgets.....	18
Food Insecurity	20
Oh, No—The Power’s Out!.....	22
Turkey Safety.....	24
Marinade Madness	26
Meat Loaf Mania	28
Oven-baked Fish.....	30
Sizzling Chicken.....	32
Intro to Perfect Pies.....	34
All-American Apple Pie	36
Intro to Canning	38
Pressure Canning Green Beans.....	40
Jam Jamboree	42
Make Your Own Fruit Leather	44
Careers in Dietetics	46
Health-minded Catering	48
Plant-based Diets.....	50
Glossary.....	52



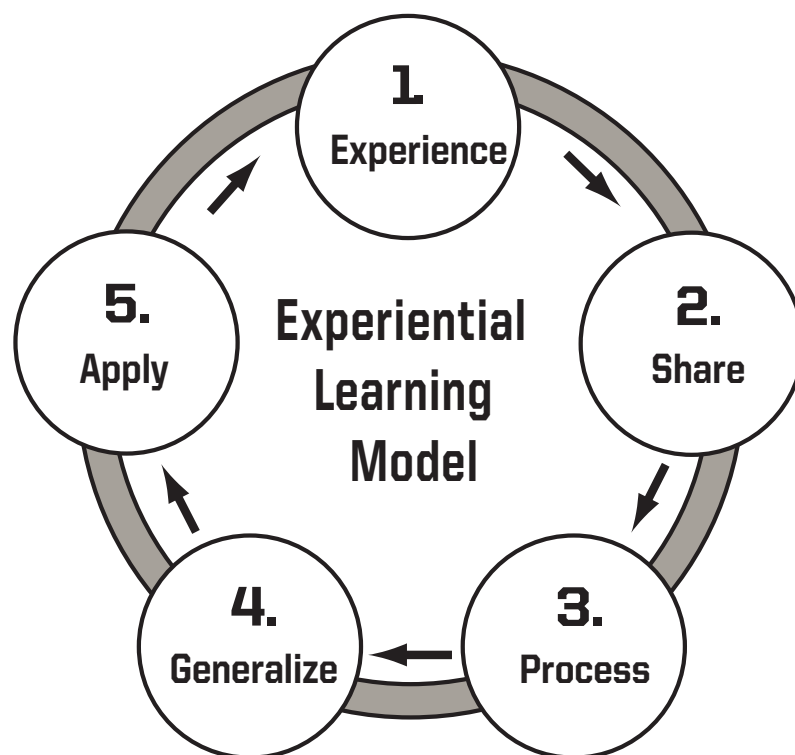
The Experiential Learning Model

Acknowledgments

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Pfeiffer, J.W., & Jones, J.E., "Reference Guide to Handbooks and Annuals"
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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).



Foodworks for the Future

Are you ready?

Are you ready to do fun experiments, prepare delicious recipes, and go on fact-finding missions? That's what Foodworks 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 Foodworks 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.



Lifetime Nutrition

You have learned about the Dietary Guidelines in previous levels of the Foods curriculum. To refresh your memory, the Dietary Guidelines' main messages are below. These messages apply to people of all ages. Now we're going one step further to look at nutritional needs during some specific stages of life. Keep these messages in mind as we learn about nutritional needs for the young and old.

Balancing calories

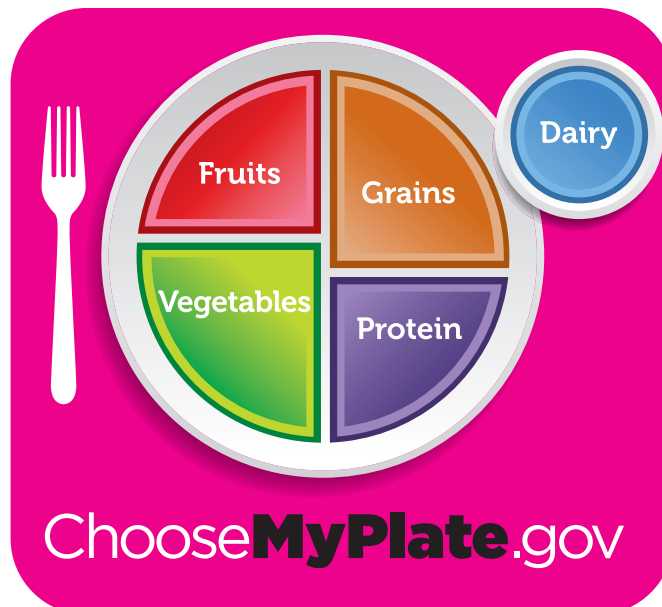
- Enjoy your food, but eat less.
- Avoid oversized portions.

Foods to increase

- Make half your plate fruits and vegetables.
- Make at least half your grains whole grains.
- Switch to fat-free or low-fat (1%) milk.

Foods to reduce

- Compare sodium in foods like soup, bread, and frozen meals, and choose the foods with lower numbers.
- Drink water instead of sugary drinks.



Nutrition Through the Lifecycle

The Centers for Disease Control estimates average life expectancy to be 78.8 years. During this life span, nutritional needs vary greatly. In general, energy (calorie) needs are highest when you are growing rapidly. This includes infancy, childhood, and adolescence. During these times, your body needs energy and important nutrients to develop your growing brain and body.

Another stage of life when energy needs are high is pregnancy. Eating enough healthy foods to meet her own energy needs as well as the needs of the developing baby is important for a pregnant woman. If she chooses to breastfeed, her energy needs are also higher after pregnancy to produce enough breast milk for the growing baby.

On the other hand, older adults have special nutrient needs. For example, they have fewer energy needs but require the same amount of protein and other nutrients compared to young adults. Certain health problems such as heart disease, high blood pressure, or diabetes might require special nutritional considerations.



Infant and Toddler Nutrition

PROJECT SKILL:

Planning meals and snacks for children

LIFE SKILL:

Planning and organizing

.....
TIME: 45-60 minutes
.....

SUPPLIES

- Pencil
- Paper
- Project manual
- MyPlate resources (www.choosemyplate.gov)
- Food items necessary to prepare meal/snack



If you have younger siblings or cousins or ever babysat for young children, you probably know that feeding a young child can be an adventure! Nutritional needs and eating habits change a great deal from infancy to toddlerhood.

Babies grow very quickly; they triple their weight in the first year of life. This is the most rapid phase of physical growth of anyone's lifetime. For the first four to six months of life, breast milk or formula provides all of a growing baby's needs. Sometime between four and six months, parents begin to introduce solid foods. (Learn more about babies' eating patterns on the next page.)

In the second year of life, babies' appetites and growth rate slow down. At this point, many children can eat much of what the rest of the family is having at mealtime, as long as it is cut into bite-sized pieces. However, appetites can vary, and this is often when babies are described as picky eaters. This can be frustrating for parents and caretakers, but as long as you continue to offer a wide variety of nutritious foods in small portions, the child will eat enough. You should not force a child to eat a certain amount.

It is important that family mealtimes are enjoyable, not a battle between the adult and child. A positive atmosphere helps children have positive opinions of food.

- Family mealtime in which adults can model healthy eating should be encouraged as much as possible.
- Minimize distractions like the TV, computer, and cell phones at mealtime.
- Involve children in meal preparation to the best of their ability.

For this activity, use your MyPlate knowledge to plan one meal and one snack for a toddler. Include a variety of foods and a beverage. Next, put your plan into action and prepare the meal and/or snack for a toddler in your life.



KITCHEN TALK

1. Was it hard to plan a meal and snack for a child of this age? What foods and beverages did you select?

2. Did the child enjoy the food items you selected?

3. List five ways you could make the food more acceptable to children.

4. Try some of the suggestions to create a positive eating environment. Did you notice a difference? What else can you do to create a positive eating environment?

About babies

Babies younger than 4 months have a physiological suck-swallow reflex that makes it difficult for them to swallow strained food from a spoon. Babies need to be able to hold their heads up and sit with assistance before they can eat cereal and solid food.

The American Academy of Pediatrics recommends that babies start solid foods with an iron-fortified single-grain cereal such as rice cereal. When babies get used to cereal, move forward with fruits and vegetables.

Soft and easy-to-swallow foods are necessary because babies don't have many teeth. Table food can be strained and mashed as long as it was prepared and stored properly, or prepared baby food can be purchased. Try one new food every three to four days instead of feeding many new foods at once. This helps identify any possible food allergies.

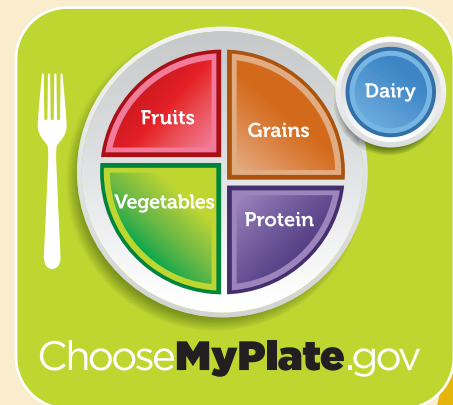
Never give sweet liquids such as soda or juice to babies. Sweet liquids can decay a baby's newly emerging teeth. Don't put a bottle in the crib at naptime or bedtime, because liquids pooling in the baby's mouth as he or she falls asleep can decay teeth and cause ear infections.

EXTRA BITE



1. Interview a dietitian or pediatrician to learn how children's nutrient needs change between the ages of 1 and 10. Which nutrients are most often deficient in children's diets?

2. To learn more about feeding and taking care of young children, take a babysitting class in your area.



Cooking with Kids

PROJECT SKILL:

Conducting a food preparation activity for young children

LIFE SKILL:

Exercising leadership and teaching

TIME: 2-4 hours planning and preparation time, 60 minutes for activity with kids

SUPPLIES

- Project manual
- Junior Leader Club
- Recipe appropriate for young children



Healthy eating habits begin in childhood. Parents, grandparents, caregivers, and older siblings can set a positive example for young children in health and nutrition. For example, you can teach children about food and how to cook. Just as you've learned to cook through this project, teaching these skills to the young children in your life is important.

Involving children in meal planning and preparation gives them some ownership of the food being served and creates excitement about meal and snack time. Research shows that children who are involved with cooking at home are more likely to try healthy foods. They are also more likely to skip junk food and eat with their families. The entire family benefits from sitting down to a family meal! It provides quality time together, conversation, and reconnecting after work and school. Another bonus is that families who eat together regularly are often more healthy.

Kids who learn to cook at a young age are gaining a skill that will be useful for the rest of their lives. They learn to eat well, and these habits transition with them into adolescence and adulthood.

You can find age-appropriate activities or ways for even very young children to help in the kitchen. Below are a few ideas.

Babies: They can't help cook yet, but you can narrate your actions to them. Give them their own measuring cup or spoon to play with as you cook. Tell them when you are stirring or slicing, or putting dinner in the oven. They learn by watching.

Age 2

- wipe table tops
- move premeasured ingredients from one place to another
- play with utensils
- snap fresh beans
- tear lettuce and salad greens
- scrub and dip vegetables and fruits

Age 3

- pour liquids into a batter
- mix batter (in an extra large bowl to prevent a big mess!)
- spread soft spreads such as peanut butter
- knead dough
- wrap potatoes in foil for baking
- put trash in the garbage can

Ages 4-5

- set the table
- mash soft fruits (bananas) and cooked vegetables with a fork
- roll bananas in cereal for a snack
- measure dry and liquid ingredients
- peel loose-skinned oranges and hard-cooked eggs
- beat eggs with an eggbeater or whisk
- cut with a blunt knife (such as fruit on a cutting board)



Extension - 4-H Youth
Development



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