4-H Fun with Foods
Level I

4-H Food & Nutrition

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4-H Fun with Foods is an update of Food & Nutrition Have Fun with Foods Phase 1
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Introduction

Welcome to an exciting year in 4-H Foods! You are starting on a new adventure! Your projects in foods can be exciting and rewarding as you learn about different types of foods and how to prepare them for your club and your family.

A few recipes are included in this manual. Try them and then look for new and different suggestions in magazines, recipe books, and other places. Be adventurous; try new foods and combinations so that you can add variety to the list of foods you like best.

After each club meeting, prepare some of the foods at home. This will give you an opportunity to learn more and to help prepare food for your family. Remember – practice makes perfect, and it allows you to make each recipe special.

Activities for this Project

- Prepare and serve food at home and at club meetings
- Do experiments to learn the science behind cooking
- Visit a grocery store to learn about the cost and variety of foods, and how to become a smart shopper
- Improve quality - judge the quality of foods you prepare
- Teach others - give a demonstration
- Expand knowledge - learn the food pyramid and how it contributes to good health
- Learn safe practices in food preparation
- Make your club outstanding - participate in some of the following:
  - County Contests and State Contests
  - County Fair Exhibits
  - Community Service Projects
  - County and Community 4-H Events

This list will help to remind you of the things you can do. Keep a record of the work you do at home and at club meetings. If you start now, you will soon have a complete record. Record what you have done at the end of each lesson and transfer the information to your 4-H portfolio. You may do much more than is required for completion of this unit. Write these things in your portfolio book also. Contact your local Extension office for information on portfolios or go to www.Utah4H.org. Refer to the appendix of this manual to find where your local Extension office is located.
County Contests and State Contests
Consider demonstrating your new cooking skills in a county contest or at the state level.

County Fair Exhibits
There are several areas where you can enter:
✧ Cookies
✧ Brownies
✧ Invented Snack
✧ Veggie Creature
✧ Table Setting
✧ Beginning Recipe Collection
✧ Food Safety Poster

Community Service Projects
✧ Volunteer at a Food Bank
✧ Prepare food for neighbor in need
✧ Participate in a Food Drive
✧ Can you think of others?

County and Community 4-H Events
Contact your local USU County Extension office for more information on other events. Please see Appendix A for the list of County contact information.
**Nutrition Background Information**

There are more than 100 trillion cells in your body. Each of these has its own life pretty much just like yours. Cells take in food, grow, reproduce, and they eventually die. Different groups of cells make up different parts of your body—like your bones and your skin and your muscles and your blood. Each cell has a job to do. All of these cells need nutrients to do their work. These nutrients come from the food you eat.

There are many different kinds of nutrients. All of them are important in helping your body grow, repair cells, and generally stay healthy.

Luckily we don’t have to try to remember the names of all of these nutrients. That’s because nutrition experts have put all of them into the MyPyramid basic food groups:
- Grains like breads, cereal, rice and pasta
- Vegetables
- Fruits
- Milk, yogurt, and cheese
- Meat, poultry, fish, beans, eggs, and nuts
- Fats, oils and sugars

If nutrients come from food, how do you know how much comes from which foods? No single food can possibly provide all the nutrients your body needs. Eating for good nutrition is like putting together a jigsaw puzzle. Each basic food has different things you need. You have to put many different pieces together to get the whole nutrition picture. That doesn’t mean you should eat a lot, it just means that you should eat a variety. For additional information and individual guidelines, see www.MyPyramid.gov.

**Physical Activity**

Don’t forget that a good diet alone will not insure good health. Physical activity also plays a major role in a good healthy body and proper utilization of the food which you eat. Everyone can benefit from exercise. Some of the benefits of exercise include having a healthier heart, controlling weight, toning up muscles, and sleeping better. All of these things contribute to a healthier mental outlook.

**Water: For Life**

Can you think of foods that contain a lot of water? You probably guessed tomatoes, oranges, and watermelon. But do you know that bread is more than one-third water? Meat is more than half water. And of course, milk and juice are nearly all water—plus natural flavoring and nutrients. Water is in every one of your cells and your body is 60-70% water. Although foods contain a lot of water, drinking 6 to 8 glasses of water a day is recommended.
There are a number of exciting things you will need to learn as you get ready to cook! Some of the basic rules are included in this lesson. Read and discuss these with other members of your club. Then, refer back to this lesson as you go along and you will form good work habits as you learn to “have fun with food.”

Make a Clean Start

Be clean and neat, and use clean food and equipment. You will need to be careful when you handle, cook and store food to keep harmful bacteria away from it.

Guidelines:

- Make sure hands are dry before handling electric equipment.
- Tie your hair back so that it does not get into the food, and roll up your sleeves.
- Wear a clean, washable apron.
- Keep the work areas clean. Work areas are the tops of the counters, table tops, the sink and the stove. Make sure they are clean to begin with and that you keep them clean while working. Have a trash can close by.
- Use clean equipment and keep it clean. For instance, if you drop a spoon, make sure it is washed before it is used again. When you are through with equipment, be sure that it is put away.
- Learn to use a tasting spoon. Use the stirring spoon to put a taste of food into the tasting spoon. Keep the stirring spoon out of your mouth. Stir heating ingredients with a wooden spoon. Never leave a utensil resting in the pot, instead use a small dish or spoon tray on the stove to hold your stirring spoon. This will keep the stove top clean.

Hand Washing

- Hand washing is an important part of working with food. Always wash hands with soap and warm water before preparing food.
- Wash hands for 20 seconds (try singing the ABC song twice.) For more information and ideas on fun educations activities on hand washing, visit www.soaperhero.org.
- Contact your local Cooperative Extension office and ask if you can borrow the Hand-i-wash hand washing education system. Each office has a system that uses black light and special lotion to show what germs look like.
Clean Up the Easy Way

If you clean up as you work, the final clean-up will be a breeze! While you are keeping your work surfaces clean, you are cleaning up as you go. Soak or rinse each piece of equipment as soon as you finish with it.

It’s easy to clean-up! Just remember these easy steps:

If using a dishwasher:
- √ Use a rubber scraper, brush or other utensil or brush to clean away bits and particles of food before loading the dishwasher.

If washing dishes by hand:
- √ Use a rubber scraper or other utensil or brush to clean away bits and particles of food.
- √ Rather than letting the water flow while cleaning up, fill the sink with a few inches of hot water.
- √ Squeeze a bit of dish washing liquid into the dish cloth.
- √ Start with the cleanest items and move your way up to the dirtiest. For dishes which have baked on or dried food, run some water over them and set them aside or allow them to soak before washing.
- √ Rinse the washed items well. If you have two sinks, use one to stack the washed items in preparation for the rinse.
- √ Allow items to dry in a dish drainer or on a clean towel. If you need to store dishes quickly, then dry them with a clean towel.
- √ Don’t forget to rinse out the sink so you leave it clean as well.

Read and Understand the Recipe

Read the recipe carefully and completely. This means not only reading the list of ingredients and equipment and making sure you have everything you need, but be sure that you understand all of the directions before you start. If you don’t understand, ask your leader, or another adult. This may seem like a slow process at first, but it is the way to develop efficient work habits.

Assemble Your Equipment and Supplies

Gather all of the ingredients and equipment you need for the recipe. Then prepare all of the foods that need special handling, such as chop the onions, squeeze the lemon, chop the meat, etc.

Watch and Time Your Cooking

Watch the clock or set a timer when food is cooking or baking.

Abbreviations and Measurements

Many recipes use abbreviations for common terms like teaspoon, tablespoon or cup. Knowing these abbreviations can make following a recipe much easier!

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Measuring Equipment

You have to follow a recipe carefully to prepare food you’ll enjoy making and serving. Measuring is very important to the success of a recipe. There are special utensils to use to help measure ingredients. It’s easy to measure correctly if you use standard tools. Never substitute a dry measuring cup for a liquid measuring cup. It is easy to spill fluids when a dry measuring cup is filled to the top.

Dry Measuring Cups

These cups usually come in a set of four and include a ¼ cup, ⅓ cup, ½ cup, and a 1 cup. Some sets include additional sizes.

Liquid Measuring Cups

Liquid measuring cups have a pour spout and a space above the last measuring line so liquids don’t spill during measuring and pouring.

Measuring Spoons

These are used for measuring small amounts of both liquid and dry ingredients. It’s convenient to have two sets to eliminate the need to rewash them in the middle of food preparation.
Activity 1: Learn to Measure Accurately

Goal:
Learn how to measure correctly. Recipes can be found on page 1-8. Before making the recipes, try
breaking into groups to learn different measuring techniques. Following the guidelines below, make 1-2-3
Snack Attack, Peanut Butter Balls, and/or Utterly Delicious Smoothie.

Materials Needed:
√ Dry measuring cups
√ Liquid measuring cups
√ Measuring spoons
√ Dry ingredients
√ Liquid ingredients
√ Solid ingredients

Sugar
Spoon sugar into a dry measuring cup, higher than the top of the cup. Use the straight edge of a knife or a
metal spatula to level off the top.
Brown Sugar
Break up any clumps by squeezing or rolling the bag. Spoon into a dry measuring cup. Pack it down firmly with the back of a spoon so it keeps the shape of the cup when turned over. Level with the straight edge of a spatula or knife.

Flour
Measuring flour incorrectly is a common mistake in cooking. To correctly measure flour: Use a spoon to stir flour. Then gently spoon flour out of its container into a dry measuring cup. Continue until the cup is overflowing, being careful not to pack it down. Level off with the straight edge of a knife.

Try this experiment on measuring flour
Packing the flour into the cup actually gives you more flour than you need. Try this – scoop flour in the measuring cup directly from the bag or container, then spoon that flour into another cup the proper way and see the difference in the amount measured. The difference between a packed cup and a correctly measured cup of flour is approximately 2 tablespoons!
**Shortening**

Take small amounts of shortening with a rubber spatula and pack firmly into a dry measuring cup. Level off with the straight edge of a knife or metal spatula. Clean cup out by removing shortening with a rubber spatula.

![Shortening](image1.png)

**Margarine or Butter**

Cut using measurement marks on the wrapper as a guide. Spreadable butter or trans-fat free margarine usually have air and water added. This alters the recipe. For best results in baking, use margarine, butter or stick spreads containing at least 70% vegetable oil (this will be indicated on the label).

![Margarine or Butter](image2.png)

**Liquids**

Place the liquid measuring cup on a flat counter or table. Fill to the mark for the amount of liquid needed. When doing this, the cook’s eye should be level with the mark. Use measuring spoons to measure less than ¼ cup. Remove thick liquids like molasses, corn syrup, and oil with a rubber spatula.

![Liquids](image3.png)

**Liquid Extracts and Juices**

Pour the amount needed into the appropriate measuring spoon. Never measure over the mixing bowl or pan. Hold it over a small cup or other container to catch any spills.
**Baking Powder/Baking Soda/Cornstarch/Cocoa**

Stir with a spoon to break up any lumps, then fill measuring spoon. Level it off. If there is a foil half cover on your baking powder can, you can level off the spoon by rubbing the spoon under this foil rather than using a spatula or other straight edge.

![Image of measuring baking powder](image1.png)

**Salt**

Pour salt into a small glass bowl and dip into it to measure. You may not get the right amount if you pour it into your spoon. Level off with the straight edge of a knife.

![Image of measuring salt](image2.png)

**Recipes to Practice Measuring**

**Recipe: 1-2-3 Snack Attack Mix**

Yield: 4 servings

**Ingredients:**
- 1 cup oyster crackers
- 1 cup tiny twist pretzels
- 1 teaspoon dry Ranch dressing mix
- 1 tablespoon oil
- 1 cup small square cheese crackers (reduced fat - optional)

1. Put all ingredients in a covered container.
2. Gently shake until well-coated.
Recipe: **Peanut Butter Balls**

Yield: 3 dozen

**Ingredients:**
- ⅓–½ cup creamy peanut butter
- ¼ cup honey
- ½ cup dry milk, nonfat
- ½ cup quick oats

**Directions:**
1. Mix honey and peanut butter.
2. Gradually add dry milk and quick oats and mix well.
3. Chill for easier handling.
4. Form into small balls. Chill until firm.
5. Refrigerate leftovers within 2 hours.

**Note:** Honey should not be given to children younger than one year of age.

Recipe: **Udderly Delicious Smoothie**

Food Safety Tip: Keep dairy products cold!

Yield: 1 serving

**Ingredients:**
- ½ cup of softened vanilla ice cream or frozen yogurt
- ¼ cup 100% fruit juice (grape, orange, apple)

**Utensils:**
- Measuring cups
- Small drinking cup(s)
- Sandwich size zipper bag(s)
- Scissors

**To Make:**
1. Place ice cream and juice inside a zipper bag.
2. Zip up bag forcing air out as you go. (Make sure it’s zipped.)
3. Gently knead the bag to blend the mixture together until it is somewhat melted, but not all the way.

**To Eat:**
1. Hold the bag by the zipper, with one corner over your cup.
2. With the other hand, snip off a tiny piece of the corner.
3. Allow the mixture to flow into your cup. (You may need to help your cow out by gently squeezing the bag until all the milkshake mixture is in your cup.)
Activity 2: Demonstrate How to Measure

Goal:
Demonstrate to others what was learned about measuring.

Materials Needed:
- Take turns giving a short demonstration on how to measure a certain ingredient.
- Why not give the demonstration to your family when you get home?

Directions:
1. Measure dry ingredients with measuring cups
2. Measure liquid ingredients with measuring cups
3. Measure dry ingredients with measuring spoons
4. Measure liquid ingredients with measuring spoons
5. Measure solid ingredients

What have you learned?
- Why is it important to measure dry ingredients different than wet ingredients?
- What happened that you didn’t expect would happen?

Recipe Sources
- Utah Food Sense Program
- Wyoming Cent$ible Nutrition Program

References and Resources
MEETING

Date ______________________

Foods I prepared or helped prepare ______________________________________________________

________________________________________________________________________________

I demonstrated ________________________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

This lesson taught me the following skills ______________________________________________

________________________________________________________________________________

________________________________________________________________________________

Some of the activities I tried _________________________________________________________

________________________________________________________________________________

________________________________________________________________________________

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<th># Times Prepared</th>
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