

Kitchen Equipment and Recipes

Revised July 2021 by Julie Garden-Robinson, Ph.D., R.D., L.R.D., Food and Nutrition Specialist

Learning Objectives:

- Identify and use kitchen equipment
- Correctly measure liquid and dry ingredients
- Know the meaning of creaming, whipping, beating, stirring, folding
- Be able to read and follow a simple recipe



Wash your hands with warm water and soap. Scrub for at least 20 seconds.

Wear clean clothes and an apron.

If you have long hair, tie it back so hair does not get in the food.

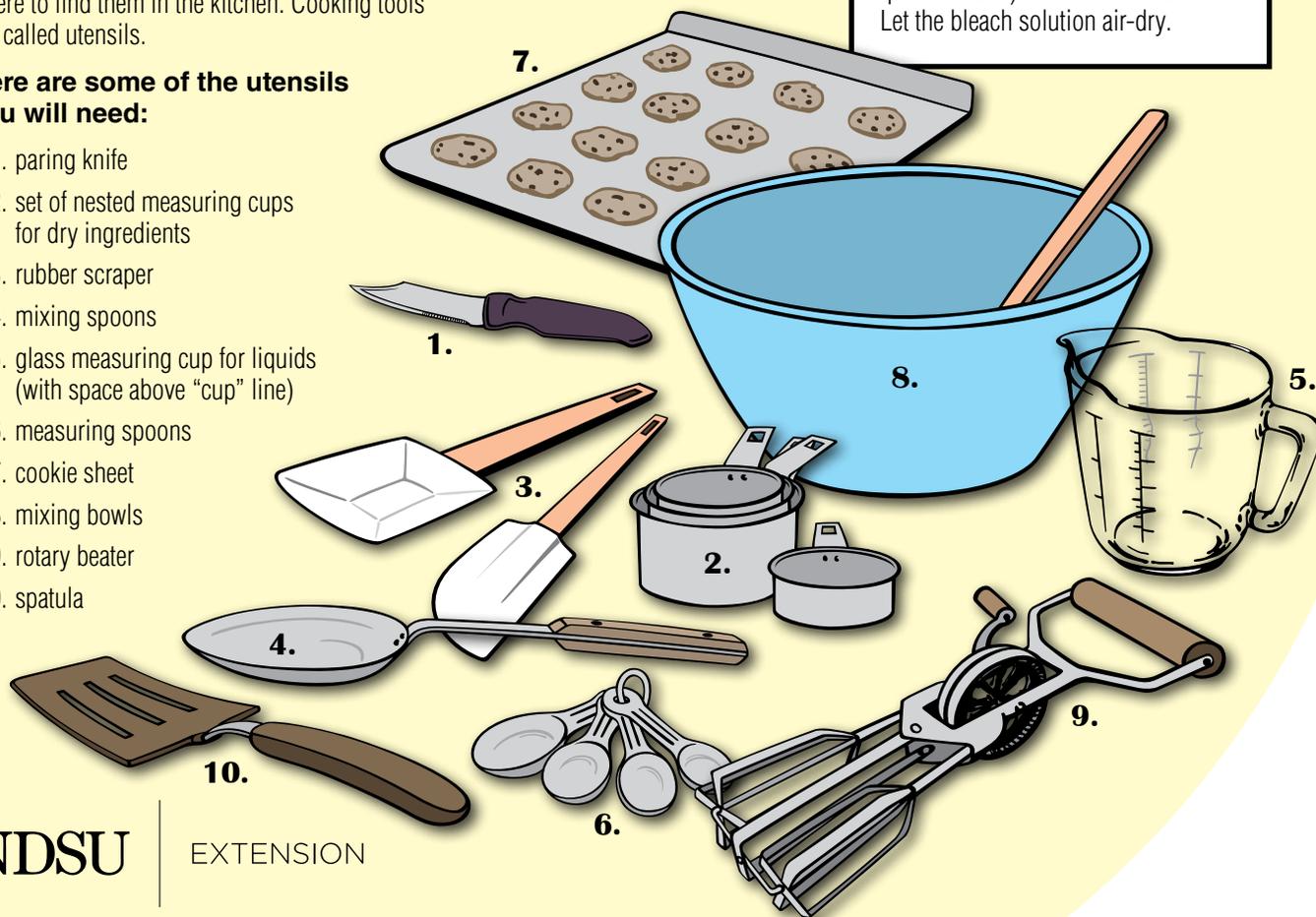
Be sure your work area is clean. Use warm, soapy water and a dishrag to clean up spills. Use a spray bottle with bleach (1 teaspoon of chlorine bleach per quart of water) to sanitize surfaces. Let the bleach solution air-dry.

Let's Get Acquainted With Kitchen Utensils

A good cook needs good tools. He or she needs to know where to find them in the kitchen. Cooking tools are called utensils.

Here are some of the utensils you will need:

1. paring knife
2. set of nested measuring cups for dry ingredients
3. rubber scraper
4. mixing spoons
5. glass measuring cup for liquids (with space above "cup" line)
6. measuring spoons
7. cookie sheet
8. mixing bowls
9. rotary beater
10. spatula



Ingredients

The things that go into a recipe are called ingredients. For example, the ingredients in muffins may be flour, sugar, salt, baking powder, vegetable oil, eggs and milk. Learn where the flour, sugar and other ingredients are kept in your kitchen.

Activity: Naming Kitchen Equipment

Visit NDSU Extension website (www.ndsu.edu/eatsmart) and see "Can You Name This Kitchen Equipment?" You will see pictures of common kitchen tools, and you can try to name them.

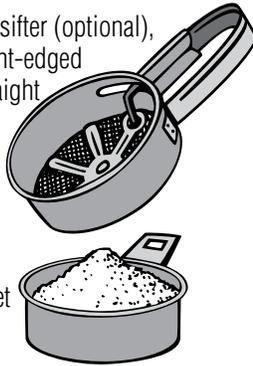
Measuring Activities

We use utensils to measure ingredients. When we measure ingredients, we need to be very exact, especially when we are baking. Otherwise, our product will not turn out right.

Activity 1: Let's Measure Flour

Get out the flour and your utensils: flour sifter (optional), dry measuring cups, tablespoons, straight-edged utensil (such as a dinner knife with a straight edge).

Step 1: Since most flour is presifted, skip to Step 2. If it is not presifted, hold the sifter over waxed paper or a shallow pan and sift the flour. Flour is sifted because it packs together and you will get more flour than the recipe calls for.



Step 2: Lightly heap the flour with a spoon into the correct-sized measuring cup. Do not shake down the flour in the cup because this will just repack it.

Step 3: When the flour is piled high in the cup, level it off with a spatula or straight-edged knife. Using a dry measuring cup instead of a liquid measuring cup allows you to level the top and get the right amount of ingredient into your recipe.

Remember: Pile, then level.

Note: if you pack the flour into a cup, you will be adding too much flour to your recipe. You could end up with a dry baked product.

Date completed: _____

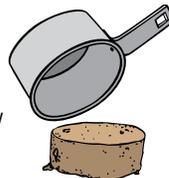
Activity 2: How to Measure Sugar

You will need a measuring cup, waxed paper or shallow pan, and a spatula or dinner knife.

White sugar: Dip the cup into the sugar; level off with a straight-edged utensil. White sugar does not need to be sifted unless it is lumpy.



Brown sugar: Pack the sugar firmly into the measuring cup. When it is taken out, it will hold the shape of the cup. Store brown sugar in a tightly covered container to keep it moist.



Spoonfuls of Dry Ingredients

Dip the spoon into the ingredients; level off with a straight-edged utensil.

Date completed: _____

Activity 3: How to Measure Fats

Utensils you need are measuring cups, rubber scraper and an utensil with a straight edge.

Method 1. Have fat (butter, margarine, shortening) at room temperature. Pack firmly into a dry measuring cup with rubber scraper. Level off with a flat edge of a knife or spatula.

Method 2. For cold, solid fats, fill a liquid measuring cup with 1 cup cold water. Pour out as much water as the amount of shortening in the recipe. Then add the cold shortening, keeping it under the water line until the water rises to make 1 cup. Drain water.



Example: For $\frac{1}{2}$ cup of shortening, pour away $\frac{1}{2}$ cup of water in a 1-cup measuring cup. Add shortening until the water rises to reach the 1-cup line.

Date completed: _____

Activity 4: How to Measure Liquids

Use a liquid measuring cup that has a space above the 1-cup mark so you won't spill the liquid. If you were to use a dry 1-cup measuring cup, you would have to fill the cup to the brim and you could spill some. If you spill, then you do not have an accurate measure.

Set the cup on the table and pour in the liquid. Now lean down so your eyes are level with the cup and you can tell when you have exactly the right amount.

Activity 5: How to Measure Liquid Spoonfuls

You will need measuring spoons and a bowl.

Dip the spoon into the ingredients and, being careful not to spill, put the liquid into the mixing bowl.



Can You Answer These Questions?

Why does some flour need to be sifted? _____

Why is a straight-edge utensil necessary for leveling when measuring? _____

Should you use a liquid cup for dry ingredients and dry cups for liquid ingredients? Explain. _____

How do you measure cold, solid fat?

Why do you lean down to see how much liquid is in a measuring cup? _____

Date completed: _____

How does measuring brown sugar and white sugar differ? _____

Reading a Recipe Activity

Activity: Let's Read a Recipe

Have you ever read a recipe? To make recipes easy, follow these suggestions:

Read the entire recipe before you begin to cook.

Ask someone to explain anything you don't understand.

Find the necessary ingredients listed.

Decide what equipment will be needed.

Do any special "beforehands," such as preheating the oven or melting butter.

Apple Pancakes

- 1 Granny Smith apple
- 1 ¼ c. any type pancake mix
- ½ tsp. cinnamon
- 1 egg
- 2 tsp. canola oil
- 1 c. low-fat milk

Lightly coat a griddle or skillet with cooking spray and heat over medium heat. Peel, core and thinly slice apple into rings. In a large mixing bowl, combine ingredients for pancake batter. Stir until ingredients are evenly moist. (Small lumps are OK. Overmixing makes pancakes tough.) For each pancake, place an apple ring on the griddle and pour about 1/4 cup batter over an apple ring, starting in the center and covering the apple. Cook until bubbles appear. Turn and cook other side until lightly brown.

Makes six servings (two pancakes each).
 Each serving has 160 calories, 4 grams (g) fat, 24 g carbohydrate and 1 g fiber.

Try These Questions:

1. How much pancake mix do you need? _____

2. What equipment do you need? _____

3. To what temperature should you preheat the griddle? _____

4. How do you know when to flip the pancakes? _____

5. How do you know the pancakes are done? _____

Date completed: _____

Answers: 1. 1 ¼ cup; 2. Measuring cups, measuring spoons, knife, peeler and/or apple corer, bowl, griddle, pancake turner (others?); 3. Heat to medium heat; 4. Flip the pancakes when bubbles appear; 5. Pancakes are done when they are light brown on both sides.

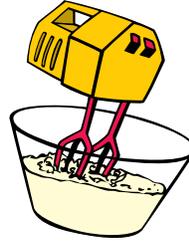
Mixing Activities

We need to know one more thing before we can start to bake. We need to understand some of the directions found in recipes.

Activity: Let's Explore Mixing Terms

To Cream Fat

This may be done with a spoon (a wooden spoon works well) or an electric mixer. Beat the shortening until it is smooth and fluffy. You often are directed to cream shortening and sugar. If you use a spoon, rub the ingredients against the side of the bowl to soften and mix. Then beat until fluffy.



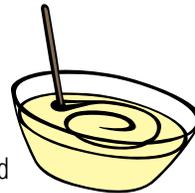
To Beat

This direction means to vigorously mix ingredients together to make sure they are thoroughly combined. Sometimes it means to mix air with the ingredients. This can be done with a spoon, fork or beater. The recipe usually will tell you which to use.



To Stir

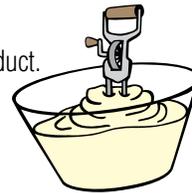
When a recipe tells you to "stir," mix the ingredients around in a circle with a spoon to make sure they are combined well.



When adding flour to a liquid mixture, the more you work it, the tougher the finished product will be. Stir flour as little as possible except when making products such as bread and pizza dough that need more mixing.

To Whip

Ingredients are whipped to incorporate air to make a lighter, fluffier product. This is done with a beater. Think about what cream looks like. Then imagine what whipped cream looks like.



To Fold

When a recipe says to "fold" in an ingredient, it means to mix gently. A clean rubber scraper or wooden spoon works well to fold in ingredients. Bring the scraper or spoon down through the mixture, across the bottom and up over the top until the ingredients are well-blended. Folding is done when a mixture is very delicate. For instance, if you want to add cheese to beaten egg white, the white would break down and lose all of the air if you handled it roughly.



More Information and Recipes to Try

See "Now Serving: Well-measured Recipes" available at: <https://www.ag.ndsu.edu/publications/food-nutrition/now-serving-well-measured-recipes>

The NDSU Extension does not endorse commercial products or companies even though reference may be made to tradenames, trademarks or service names.

NDSU encourages you to use and share this content, but please do so under the conditions of our Creative Commons license. You may copy, distribute, transmit and adapt this work as long as you give full attribution, don't use the work for commercial purposes and share your resulting work similarly. For more information, visit www.ag.ndsu.edu/agcomm/creative-commons.

For more information on this and other topics, see www.ndsu.edu/extension

County commissions, North Dakota State University and U.S. Department of Agriculture cooperating. NDSU does not discriminate in its programs and activities on the basis of age, color, gender expression/identity, genetic information, marital status, national origin, participation in lawful off-campus activity, physical or mental disability, pregnancy, public assistance status, race, religion, sex, sexual orientation, spousal relationship to current employee, or veteran status, as applicable. Direct inquiries to Vice Provost for Title IX/ADA Coordinator, Old Main 201, NDSU Main Campus, 701-231-7708, ndsu.eoaa@ndsu.edu. This publication will be made available in alternative formats for people with disabilities upon request, 701-231-7881.

Quiz: Do you know the cooking term?

1. This word means you are to move ingredients around in a circle with a spoon:

2. This word is used when you are to mix fat (such as butter) and sugar until it is fluffy:

3. This word means you are to mix ingredients vigorously:

4. This word means you are to mix in an ingredient, such as egg whites, gently:

5. This word is used when you incorporate air, such as making a topping for pie.

Date completed: _____

Answers: 1. Stir; 2. Cream; 3. Beat; 4. Fold; 5. Whip

Activity: Let's Make Pancakes

Now that you know how to measure and read a recipe, try making pancakes using the recipe in this handout. Be sure to get help from an adult.

Date completed: _____

Science Whys

Did you know that the heat in an oven is the most even right in the center of the oven? Be sure to place foods on the racks so the center of the food is in the center of the oven.