

Recipe Math: Master Measurer

Measure up

Measuring tools help get the best results when preparing a recipe. Here are some basic measuring tools:

Liquid measuring cups are used to measure liquid foods that pour, such as milk or oil. Measuring cups have graduated measures on the side. The pour spout prevents spilling, and the handle gives you more control when pouring.

Liquids should be measured on a flat surface. Position yourself so that you are eye level with the measuring cup for the best accuracy. The liquid in the container will have a slightly curved appearance. Measure the desired amount at the bottom of the curve.

Dry measuring cups are used to measure foods that are dry, solid, or very thick. To measure ingredients in a dry measuring cup, gently fill the cup until heaping over the top of the measuring utensil. Then

level with a straight edge, such as the back of a butter knife, to remove the extra. In a recipe, measurements are always level, unless stated otherwise.

Measuring spoons are used to measure small quantities of both dry and liquid ingredients. It is helpful to have two sets so one can be used for dry and one for liquid ingredients. A set of measuring spoons will include 1/4 teaspoon, 1/2 teaspoon, 1 teaspoon, and 1 tablespoon. Other sets might include additional measurements. For liquid ingredients, fill until completely full. Dry ingredients should be measured in the same manner as using dry measuring cups.

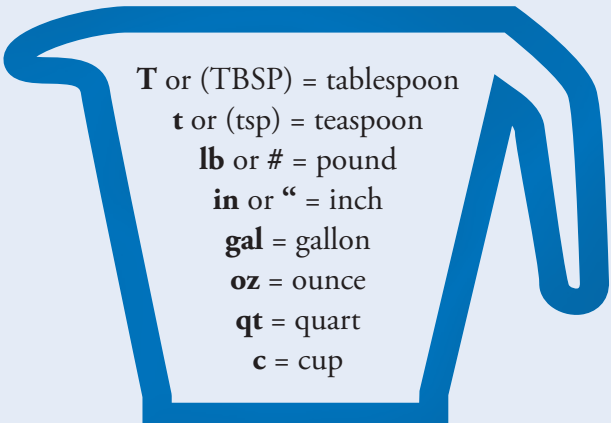
Measuring tips

All dry and thick ingredients are not measured the same. Here are some tips for measuring common dry ingredients.

- Some recipes call for sifting the flour before measuring. Follow this step for more exact measuring.
- Stirring the flour before measuring is a good practice even if the recipe does not call for sifting.
- Flour should be spooned lightly into the measuring cup before leveling off. Avoid scooping flour with a measuring tool as this packs it down and will be more than the recipe calls for.
- Brown sugar, peanut butter, and solid fats should be packed into the measuring cup before leveling off. This helps remove air from the ingredient for better measuring accuracy.
- For sour cream, yogurt, and other similar textured foods, fill the dry measuring cup heaping full, tap down on a hard surface lightly several times to fill air pockets then level off.

Measuring abbreviations

To help you understand recipes, it is good to know some abbreviations and what they stand for:



T or (TBSP) = tablespoon
t or (tsp) = teaspoon
lb or # = pound
in or " = inch
gal = gallon
oz = ounce
qt = quart
c = cup

Measuring equivalents



1 tablespoon = 3 teaspoons



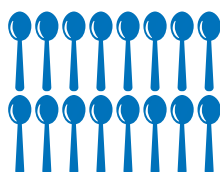
4 tablespoons = 2 fluid ounces = 1/4 cup



5 tablespoons + 1 teaspoon = 1/3 cup



8 tablespoons = 4 fluid ounces = 1/2 cup



16 tablespoons = 8 fluid ounces = 1 cup



4 cups = 32 fluid ounces = 1 quart



4 quarts = 1 gallon



1 cup butter or margarine = 1/2 pound = 2 sticks



2 tablespoons = 1 ounce



Adjusting recipes

If you are cooking for one or two, often you need to adjust or modify a recipe to provide fewer servings. When you know how to decrease or increase the number of servings for a recipe, you will always have the exact amount of food you need.

This handout has some measurement equivalents which can help you adjust any recipe to the number of servings you need. You can also check the measurements for reducing recipes chart for more help.

The standard size egg for recipes is a large egg. If you need half of an egg, break it, mix it together with a fork and use 2 tablespoons. Refrigerate the rest and use it in an omelet or scrambled eggs within two days.

Use appliances geared toward cooking smaller quantities such as the microwave, toaster oven, electric grill, air fryer, and small slow cookers.

When reducing recipes, you may need to use smaller saucepans, skillets, and baking pans to get good results. Here are some tips:

- A 9-by-2-by-13-inch pan holds 14 to 15 cups. For half of a recipe, use a square 8-by-8-by-2-inch pan, or a round 9-by-2-inch pan.
- When using a different pan size, try to keep the depth of food the same as the original recipe.
- Reduce the oven temperature by 25 degrees when substituting a glass pan for a metal one.
- The time needed for baking smaller amounts of food may be less. Check on cooking progress regularly so the food does not burn.

Authors: Brooke Jenkins, MS, and Jeannie Najor, MS, RD, Extension Specialists for the Nutrition Education Program, University of Kentucky Cooperative Extension Service

To divide recipes, remember:

1 cup	=	16 tablespoons
1 tablespoon	=	3 teaspoons
1 fluid ounce	=	2 tablespoons
1 pint	=	2 cups
1 quart	=	2 pints or 4 cups
1 gallon	=	4 quarts or 16 cups
1 pound	=	16 ounces

Half of a recipe

When the recipe calls for	Use
1/4 cup	2 tablespoons
1/3 cup	2 tablespoons + 2 teaspoons
1/2 cup	1/4 cup
2/3 cup	1/3 cup
3/4 cup	6 tablespoons
1 tablespoon	1 1/2 teaspoons
1 teaspoon	1/2 teaspoon
1/2 teaspoon	1/4 teaspoon

Third of a recipe

1/4 cup	1 tablespoon + 1 teaspoon
1/3 cup	1 tablespoon + 2 1/3 teaspoons
1/2 cup	2 tablespoons + 2 teaspoons
3/4 cup	1/4 cup
1 cup	1/3 cup
1 tablespoon	1 teaspoon
1 teaspoon	1/3 teaspoon

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