## Recipe Basics

Measure accurately, substitute wisely, adjust carefully

## Commonly used abbreviations

t. or tsp. $=$ teaspoon
T. or Tbsp. $=$ tablespoon
c. = cup
pt. $=$ pint
qt. $=$ quart
gal. = gallon
fl. oz. = fluid ounce
oz. = ounce
lb. = pound
pkg. = package
doz. $=$ dozen
min. $=$ minute
hr. = hour
mod. = moderate
${ }^{\circ}$ C. $=$ Celsius
${ }^{\circ} \mathrm{F}$. $=$ Fahrenheit
Equivalent amounts

| $1 / 2$ Tbsp. | $11 / 2$ tsp. | 1/4 fl. oz. |
| :---: | :---: | :---: |
| 1 Tbsp. | 3 tsp . | $1 / 2 \mathrm{fl}$. oz. |
| $1 / 4$ c. | 4 Tbsp. | 2 fl . oz. |
| $1 / 3 \mathrm{c}$. | 5 Tbsp. + 1 tsp. |  |
| $1 / 2 \mathrm{C}$. | 8 Tbsp. | 4 fl .0 oz |
| 1 c . | 16 Tbsp. | 8 fl . oz . |
| $1 \mathrm{pt}$. | 2 c. | 16 fl . oz. |
| $1 \mathrm{qt}$. | 2 pt . or 4 c . | 32 fl . oz . |
| 1 gal . | 4 qt . | 128 fl oz. |

For margarine/butter:

| 1 lb. | 4 sticks |
| :--- | :--- |
| 1 stick | $1 / 2 \mathrm{c}$. or 8 Tbsp. |

## Additional resources from lowa State University Extension and Outreach

AnswerLine
(www.extension.iastate.edu/ answerline)
Call 1-800-262-3804 or (515) 296-5883
Spend Smart. Eat Smart. ${ }^{\circledR}$
(spendsmart.extension.iastate.edu)

Practice makes any cook better, but even a first-time cook can achieve success by following a few basic guidelines. Before starting to work, read the recipe carefully, plan each step, and gather all needed ingredients and utensils.

## Measure accurately

Fannie Farmer, "the mother of level measurements" had it right when she published her 1896 collection of recipes and insisted on the use of standard measuring cups and spoons. Every recipe requires measuring something; neither fancy tools nor gourmet recipes can make up for careless measuring.


Read at the bottom of the meniscus

## Dry measuring cup



- Used to measure dry ingredients (flour, sugar, brown sugar, oatmeal, etc.)
- Has no rim
- Standard set is metal or plastic and includes 1 cup, $1 / 2$ cup, $1 / 3$ cup, and $1 / 4$ cup
- To use: spoon, scoop or dip out the ingredient into the cup; level with the straight edge of a knife or a metal spatula


## Measuring spoons

- Used to measure amounts smaller than $1 / 4$ cup
- Standard set includes 1 tablespoon, 1 teaspoon, $1 / 2$ teaspoon, and $1 / 4$ teaspoon
- To use: level dry ingredients with the straight edge of a knife or metal spatula


## Ingredient hints

Flour is presifted before packaging but settles during transportation and storage; stir before scooping.
Brown sugar should be packed down so that it holds the shape of the cup when removed.
Granulated (white) sugar may have clumps; break apart before measuring.
Vegetable shortening is stored at room temperature; spoon into cup and pack down to remove air pockets; use a rubber scraper to remove measured amount (rinsing cup in water first can make it easier).


## Substitute wisely

Using the ingredient specified in the recipe will produce results closest to those intended by the recipe creator. However, it is good to know what substitutions are possible if you are missing an ingredient. In most recipes, making the following substitutions should produce results similar to the original recipe.

| If recipe calls for | Try this substitution |
| :---: | :---: |
| Baking powder (1 tsp.) | $1 / 4 \mathrm{tsp}$. baking soda plus $3 / 4$ tsp. cream of tartar |
| Butter, margarine or vegetable shortening in baking (1 c.) | 1 c . oil $\mathrm{OR} 3 / 4 \mathrm{c}$. applesauce, apple butter, or avocado plus $1 / 4 \mathrm{c}$. solid fat OR 1 c . ripened/mashed bananas |
| Chocolate (unsweetened, 1 oz.) | 3 Tbsp. cocoa powder plus 1 Tbsp. butter, margarine, or vegetable shortening OR 1 ounce semi-sweet chocolate minus 1 Tbsp. sugar |
| Cornstarch (1 Tbsp.) | 2 Tbsp. flour OR 2 Tbsp. tapioca pearls |
| Corn syrup (1 c.) | 1 c . golden syrup or honey OR 1 c . sugar plus $1 / 4 \mathrm{c}$. liquid |
| Cream of tartar (1 tsp.) | 1 tsp. white vinegar OR Iemon juice |
| Egg (1) | 2 egg whites 0 R $1 / 4 \mathrm{c}$. egg substitute |
| Flour, all-purpose (1 c.) | $1 / 2 \mathrm{c}$. whole wheat plus $1 / 2 \mathrm{c}$. all-purpose flour |
| Flour, cake (1 c.) | $3 / 4$ c. plus 2 Tbsp. all-purpose flour |
| Flour, self-rising (1 c.) | 1 c. all-purpose flour plus $11 / 2$ tsp. baking powder plus $1 / 2$ tsp. salt |
| Garlic | $1 / 8$ tsp. garlic powder |
| Honey (1 c.) | 1 c. corn syrup OR $11 / 2$ c. brown or granulated sugar plus $1 / 4$ c. additional liquid minus $1 / 2$ tsp. baking soda |
| Lemon juice (1 tsp.) | $33 / 4$ tsp. lime juice plus $1 / 2$ tsp. vinegar |
| Miniature marshmallows (1 c.) | 10 large marshmallows |
| Milk, buttermilk or sour (1 c.) | 1 Tbsp. lemon juice or vinegar plus 1 c . regular, soy, or nut milk (let sit at least 10 minutes) $0 R^{2 / 3}$ c. plain yogurt plus $1 / 3 \mathrm{c}$. milk |
| Milk, whole (1 c.) | 1 c . reduced fat or fat free milk $\operatorname{OR} 1 \mathrm{c}$. soy milk $\operatorname{OR} 1 / 2$ c. evaporated milk plus $1 / 2 \mathrm{c}$. water |
| Molasses (1 c.) | 1 c . corn syrup, honey, or maple syrup OR $11 / 2$ c. brown sugar |
| Non-dairy coffee creamer (1 Tbsp.) | 1 Tbsp. instant dry milk plus 1 Tbsp. water |
| Sour cream (1 c.) | 1 Tbsp. lemon juice plus evaporated milk to make 1 c. (let stand to thicken) OR 1 c. cottage cheese plus 2 Tbsp . milk plus 2 Tbsp. lemon juice (blended) $O R 1 / 2$ c. cottage cheese plus $1 / 2$ c. yogurt (blended) |
| Sugar, brown (1 c.) | 1 c . granulated sugar plus 2 Tbsp . molasses |
| Sugar, confectioners or powdered (1 c.) | 1 c . granulated sugar plus 1 Tbsp. cornstarch (blended in a food processer using the metal blade attachment until well combined and powdery) |
| Sugar, granulated (1 c.) | 1 c . light brown sugar OR $13 / 4 \mathrm{c}$. powdered sugar |
| Tomato juice (1 c.) | $1 / 2 \mathrm{c}$. tomato sauce or tomato puree plus $1 / 2 \mathrm{c}$. water |
| Tomato sauce (1 c.) | 1 c . tomato puree $\mathrm{OR} 1 / 2 \mathrm{c}$. tomato paste plus $1 / 2 \mathrm{c}$. water |
| Yogurt, plain (1 c.) | 1 c . buttermilk, sour cream, or cottage cheese (blended) |

## Adjust carefully

Often it's easier to make the whole recipe and freeze half or third. If not, use these guidelines.

| If recipe calls for | Use this amount to make $1 / 2$ of total | Use this amount to make $1 / 3$ of total | Reviewed by Ruth Litchfield, PhD, |
| :---: | :---: | :---: | :---: |
| $1 / 4$ cup | 2 tablespoons | 1 tablespoon +1 teaspoon | RD, LD, state nutrition and wellness |
| $1 / 3$ cup | 2 tablespoons + 2 teaspoons | 1 tablespoon $+21 / 4$ teaspoons | specialist, lowa State University <br> Extension and Outreach. |
| $1 / 2$ cup | $1 / 4$ cup | 2 tablespoons + 2 teaspoons |  |
| 2/3 cup | $1 / 3$ cup | 3 tablespoons $+11 / 2$ teaspoons | Outreach does not discriminate on the basis |
| $3 / 4$ cup | 6 tablespoons | $1 / 4$ cup | of age, disability, ethnicity, gender identity, genetic information, marital status, national |
| 1 cup | $1 / 2$ cup | $1 / 3$ cup | origin, pregnancy, race, color, religion, sex, sexual orientation, socioeconomic status, or |
| 1 tablespoon | $11 / 2$ teaspoons | 1 teaspoon | status as a U.S. veteran, or other protected classes. (Not all prohibited bases apply |
| 1 teaspoon | $1 / 2$ teaspoon | Generous $1 / 4$ teaspoon | to all programs.) Inquiries regarding non- |
| $1 / 2$ teaspoon | $1 / 4$ teaspoon | Scant $1 / 4$ teaspoon | discrimination policies may be directed to the Diversity Advisor, 2150 Beardshear Hall, |
| $1 / 4$ teaspoon | $1 / 8$ teaspoon | Scant $1 / 4$ teaspoon | 515 Morrill Road, Ames, lowa 50011, 515-294-1482, extdiversity@iastate.edu. All other |
| Adapted with permission from University of Nebraska Extension (food.unl.edu/reducing-size-recipes-0). |  |  | inquiries may be directed to 800-262-3804. PM 2078 September 2019 |

