The tips and charts in this fact sheet will help you adapt recipes for fewer servings. You'll also find the safe cooking temperatures chart helpful.

## Tips for Reducing a Recipe:

1. Recipes that need accurate measuring and precise amounts of ingredients like baked goods may be difficult to reduce so make the entire recipe, including cooking/baking, and then freeze half or freeze in individual portions.
2. Most recipes call for the standard large egg and it is $1 / 4$ cup. For half a large egg, break it into a small bowl, mix it together with a fork and use 2 tablespoons. Refrigerate the rest and use within two days.
3. Some foods, such as a meatloaf, can be mixed up, portioned into individual containers, and frozen
 raw. Then, portions can be cooked as needed.
4. Food should not be partially cooked and frozen. Freezing slows down bacterial growth but it does not stop it. Refer to temperature charts to make sure foods are cooked safely.
5. When reducing recipes, you may need to use smaller saucepans, skillets, and baking pans.
6. A $9 \times 2 \times 13$-inch pan holds 14 to 15 cups; when halving a recipe use a square $8 \times 8 \times 2$-inch pan or a round $9 \times 2$-inch pan.
7. When using a different pan size, try to keep the depth of food the same.
8. When baking, the oven temperature for the reduced recipe will be the same unless you are using a glass pan or dark metal pan. If so, reduce the oven temperature by 25 degrees F to prevent over browning and over cooking.
9. The time for baking and cooking smaller amounts of food may be less. Begin by reducing the cooking or baking time by one-half and checking to see if the product is done. If not, add additional time. Use a food thermometer for proper end-point temperatures. See the chart for Safe Minimum Temperatures on page 3.
10. When adjusting spices, herbs, and seasonings, you may want to use a little less than half and then add more if needed.

## When You Cut a Recipe

Recipes are usually for 6 to 8 servings - sometimes more. The following tables can help in cutting a recipe to half of the original recipe.

| General Measuring Equivalents |  |
| :---: | :---: |
| 1 Tablespoon | 3 teaspoons |
| 1/8 cup | 2 Tablespoons |
| $1 / 4$ cup | 4 Tablespoons |
| 1/3 cup | 5 $1 / 3$ Tablespoons |
| $1 / 2$ cup | 8 Tablespoons |
| 2/3 cup | 10 Tablespoons + 2 teaspoons |
| 3/4 cup | 12 Tablespoons |
| 1 cup | 16 Tablespoons |
| 1 cup | 8 fluid ounces (liquid measure) |
| 1 fluid ounce | 2 Tablespoons |
| 1 pint | 2 cups |
| 1 pound | 16 ounces (weight) |
| Pinch or speck | less than 1/8 teaspoon |
| Some Abbreviations |  |
| c cup |  |
| Tbsp. Tablespoon |  |
| tsp. teaspoon |  |
| oz. ounce |  |
| fl. oz. fluid ounce |  |



It may help to use your measuring cups and spoons to do some actual measuring as you figure your recipe.

## When You Want $1 ⁄ 2$ of a Recipe, Use These Equivalents

|  | Cups |
| :--- | :--- |
| $1 / 2$ of a $1 / 4$ cup | 2 Tablespoons |
| $1 / 2$ of $1 / 3$ cup | 2 Tablespoons +2 teaspoons |
| $1 / 2$ of $1 / 2$ cup | $1 / 4$ cup |
| $1 / 2$ of $2 / 3$ cup | $1 / 3$ cup |
| $1 / 2$ of 1 cup | $1 / 2$ cup |
|  | Tablespoons |
| $1 / 2$ of 1 Tablespoon | $11 / 2$ teaspoons |
| $1 / 2$ of 3 Tablespoons | 1 Tablespoon $+11 / 2$ teaspoons |
| $1 / 2$ of 5 Tablespoons | 2 Tablespoons $+11 / 2$ teaspoons |
| $1 / 2$ of 7 tablespoons | 3 Tablespoons $+11 / 2$ teaspoons |
|  | Teaspoons |
| $1 / 2$ of 1 teaspoon | $1 / 2$ teaspoon |
| $1 / 2$ of $3 / 4$ teaspoon | $3 / 8$ teaspoon |
| $1 / 2$ of $1 / 2$ teaspoon | $1 / 4$ teaspoon |



## Safe Minimum Cooking Temperatures

(foodsafety.gov/food-safety-charts/safe-minimum-cooking-temperature)

| Food | Type | Internal Temperature ( ${ }^{\circ}$ F) |  |
| :--- | :--- | :--- | :--- |
| Ground meat and meat <br> mixtures | Beef, pork, veal, lamb | 160 |  |
| Fresh beef, veal, lamb | Turkey, chicken | Steaks, roasts, chops (Rest time: 3 minutes) | 165 |
| Poultry | All Poultry (breasts, whole bird, legs, thighs, wings, <br> ground poultry, giblets, and stuffing) | 145 |  |
| Pork and ham | Fresh pork, including fresh ham (Rest time: 3 minutes) | 145 |  |
|  | Precooked ham (to reheat) <br> Note: Reheat cooked hams packaged in USDA-inspect- <br> ed plants to 140F | 165 |  |
| Eggs and egg dishes | Eggs | Cook until yolk and white are firm |  |
| Leftovers and casseroles | Egg dishes (such as frittata, quiche) | 160 |  |
| Leaftovers and casseroles | 165 |  |  |

## Kitchen Tools and Substitutions

If you need a kitchen tool that you don't have, here are some alternatives you can try.

| Kitchen Tools | Tool Ideas |
| :--- | :--- |
| Measuring cup | Marked jar or baby bottle |
| Colander | Pan with lid |
| Cookie sheet | Bottom side of cake pans |
| Rolling pin | Smooth bottle or glass |
| Potato masher | Two forks |
| Measuring spoons | Regular teaspoon and/or tablespoon |
| Tea kettle | Deep kettle or pan |
| Cutting board | Sturdy plate or heavy brown shopping bag |
| Pie pan | Flat cake pan |
| Round cake pan | Square or oblong pan |
| Biscuit/cookie cutters | Lids, rim of jars, rim of cans, glasses |
| Ladle for serving soup | Cup with handle |
| Spatula | 2 knives |
| Cooling rack | Oven rack |
| Roasting pan | Any pan/skillet that can be used in the oven with a cover, or make a cover of foil |
| Wire whisk | 2 forks or jar with a tight lid |
| Pot holder | Folded dry towel $\quad$ Kansas State University I |

## Cranberry Pumpkin Muffins-Reducing a Recipe Worksheet

Here's an opportunity to practice reducing a recipe. The measurements for 12 servings are given. Use the tables on page 2 to help you cut the recipe in half, to make 6 servings, and fill in those amounts in the table. Then bake!

| Ingredients | $\mathbf{1 2}$ Servings |
| :--- | :--- |
| Flour | 2 cups |
| Sugar | $3 / 4$ cup |
| Baking Powder | 3 teaspoons |
| Salt | $1 / 2$ teaspoon |
| Cinnamon | $1 / 2$ teaspoon |
| Allspice | $3 / 4$ teaspoon |
| Vegetable Oil | $1 / 3$ cup |
| Eggs, large | 2 |
| Cranberries, fresh or frozen, chopped | 2 cups |

## Directions:

1. Preheat oven to 400 degrees.
2. Sift or stir together dry ingredients (flour through allspice) and set aside.
3. Beat oil, eggs, and pumpkin together until well blended.
4. Add the wet ingredients (pumpkin mixture) to the dry ingredients all at once. Stir until moistened.
5. Fold in chopped cranberries.
6. Spoon into paper lined muffin cups.
7. Bake at 400 degrees for 25 to 30 minutes (For six muffins, check at 12.5 to 15 minutes. Note baking time needed: $\qquad$
Nutrition Facts: Each one cup serving ( 1 muffin) provides 200 calories, 7 g total fat, 1 g saturated fat, 230 mg sodium, 32 g total carbohydrate, 2 g dietary fiber, 3 g protein
Source: Kansas Snap-Ed EZ Does It Recipe:
https://www.hhs.k-state.edu/ks-snaped/recipes/ez-does-it/recipes/baking/cranberry-pumpkin-muffins.pdf

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