Cooking for a Crowd

Carolyn Cason
Iowa State College

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Cooking for a Crowd

By CAROLYN CASON

When it's your turn to have threshers or corn shellers—or to have club at your house—do you get out your favorite serves-6 recipes and multiply them by anything from 2 to 10?

It would seem that the only thing needed to cook gallons of macaroni and bake dozens of cookies is such a simple knowledge of the multiplication tables and a little addition. But when the macaroni turns out to be very dry and unpalatable, or the cookies too rich, you'll suspect—and rightly so—that doubling and quadrupling recipes doesn't always work.

If recipes were perfectly balanced, they could be increased by simple arithmetic. But we have relatively few perfectly balanced recipes because the measurements tend to be expressed in the most convenient terms.

A perfect recipe would have to call for ounces of salt and pounds of flour, because cups and teaspoons are not accurate. In a small-quantity recipe the slight variation makes little or no difference, but when the "error" is multiplied by 10 or 12 it produces a product that often is not like the original recipe's result at all.

Besides changes that come with increasing quantities of ingredients, there is another reason for adjusting recipes to large quantity cooking—economy. If you're entertaining, the food bill goes up with the number of persons you're serving. And if it's a church or community supper, serving as inexpensive as possible is a definite goal.

There are no hard and fast rules that can be followed in changing or increasing recipes, but the Institution Management Department at Iowa State College has discovered a few general facts through experimentation. However, the "rules" need to be mixed with common sense and judgment because of the variation in ingredients and measurements.

1. The number of eggs used may be cut down if economy is necessary. This reduction may necessitate the addition of flour or cornstarch if the egg is used as a thickening agent, or baking powder or cream of tartar if the egg is used principally as a leavening agent.

2. Fat may be substituted for part or all of the butter in a recipe. Care should be taken that the fat substituted is not too strong in flavor. For this reason it is better to use a hydrogenated rather than a non-hydrogenated lard in cakes or delicate puddings.

3. There usually is less evaporation of liquid in large recipes because proportionately less surface area is exposed; liquid, therefore, should be reduced in the large quantity recipe. Compare the following recipes for baking powder biscuits, as an example:

<table>
<thead>
<tr>
<th>Ingredients</th>
<th>15 Biscuits</th>
<th>120 Biscuits</th>
<th>500 Biscuits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bread Flour</td>
<td>2 c.</td>
<td>4 qt. (16 c.)</td>
<td>15 lb. (60 c.)</td>
</tr>
<tr>
<td>Baking powder</td>
<td>4 t.</td>
<td>2/3 c.</td>
<td>12 oz. (2 c.)</td>
</tr>
<tr>
<td>Salt</td>
<td>1 t.</td>
<td>2 T.</td>
<td>8 oz. (16 T.)</td>
</tr>
<tr>
<td>Shortening</td>
<td>2 T.</td>
<td>2 1/2 c.</td>
<td>3 lb. 12 oz. (9 3/4 c.)</td>
</tr>
<tr>
<td>Milk</td>
<td>3/4-1 c.</td>
<td>5 c.</td>
<td>5 qt. or less (20 c. or less)</td>
</tr>
</tbody>
</table>
When deciding on what changes you will make in the increased recipe, consider the role of the ingredient and be governed by that. In angel food cake or baked custard, for example, you cannot substitute for eggs because they are the chief ingredient in these products.

Because of less evaporation, a change in surface tension and proportionately less adhering to the sides of the pan, a recipe need not be increased as many times as would be necessary by direct multiplication, even from a quantity standpoint. For example, if a recipe is sufficient to serve 6, 15 times that recipe would, as a rule, serve 100 people, though by direct multiplication it would be sufficient to serve only 90. For instance, a recipe for 3 chiffon pies when tripled usually will make 11 instead of 9 pies. Of course there are variables, such as the size of the eggs used and the method of combination, which influence the bulk. Therefore the steps in increasing the recipe should be:

1. Multiply the small quantity recipe, as it stands, the number of times you think would be necessary to serve the large group.

2. Change all the measurements to the largest practical medium. For an example, express teaspoons as tablespoons, tablespoons as cups or fractions of a cup, and cups as pints, quarts or as pounds.

3. Study the recipe and decide which ingredients you can reduce with safety.

In the Quantity Cookery Class in the Institution Management Department, the above recipe for macaroni mousse was increased from a small recipe of 8 servings to one for 112.

The eggs were slightly reduced, a sharp cheese was substituted for a mild cheese and the amount considerably reduced. The butter also was reduced, but the cream, bread crumbs and macaroni were not reduced because they were less expensive and added bulk. The pimento and the parsley in the small recipe, used for seasoning, were reduced and grated onion, less expensive, was added to give a tasty product.

A quantity recipe file prepared by Lenore Sullivan, Iowa State College home economist, is available through the Collegiate Press, Ames, Iowa.