Basic Principles of Preparing Cakes and Cookies

A culinary technique is a step-by-step way to prepare a quality food product. There are several different culinary techniques for preparing cakes and cookies. The right one to use depends on the kind of cake or cookie. The recipe for a cake or cookie describes the step-by-step culinary technique that should be used. Knowing some basic culinary techniques helps a professional cook understand why the steps of a cake recipe are important to follow in order to produce a quality cake. Remember, cookies are basically small cakes, so the mixing methods for preparing cookies and cakes are similar.

The culinary technique or the mixing method that is right for a cake or cookie is based on a specific balance of ingredients, combined in a certain way. Each ingredient is included in a recipe to do a special job. Combining the ingredients using the correct culinary technique results in the ingredients working together in the right way.

To prepare a quality cake or cookie:

- begin with a good recipe.
- make only in quantities that can be baked immediately. Cake *batter* or cookie *dough* should not be left in pans waiting for an oven.
- have ingredients at the right temperature. Most cake recipes suggest that all ingredients should be at room temperature.
- weigh or measure ingredients carefully.
- follow the recipe that includes the right culinary technique or mixing method.
- weigh the right amount of cake batter for each pan.
- bake at the correct temperature.
- bake for the right amount of time.

Well-balanced cake and cookie recipes have been tested many times to be sure they produce a quality product every time. Each ingredient has a certain job to do and has a special effect on the finished product. If one ingredient is changed, it can affect many other ingredients. The message to a cook is, *follow the recipe to the letter.*

Ingredients

Knowing the job of each ingredient in a recipe can help a cook determine what happened when a product fails.

Ingredient 1: Flour

Purpose in the recipe

Most cakes and cookies have flour as a major ingredient. All-purpose flour or cake flour may be used in cakes. In some recipes up to half of the flour can be whole wheat flour. The purpose of flour in a cake or cookie recipe is to give structure, the same as in breads. Because cakes or cookie are much more delicate than breads, just a little too much or too little flour can make a big difference. Too much flour makes a cake or cookie tough and results in a coarse texture. Too little flour causes the cake to collapse or fall.

Most schools use all-purpose flour and USDA recipes require all-purpose flour. However, cake flour can be used since it gives a more tender product with a finer crumb. Cakes made with cake flour have a better volume and finer texture than ones made with regular, all-purpose flour.

Because flour in a bin packs down, weighing flour is more accurate than measuring it. When flour has to be measured, because there is no scale, stir the flour well before it is measured. Never measure more than 1 quart of flour at a time. Scrape the top of the dry measure to level flour for more accurate measuring.

Timely Tip

To substitute all-purpose flour for cake flour, for each pound of all-purpose flour weighed, remove 1/2 cup.

Ingredient 2: Sugar

Purpose in the recipe

Sugar provides the sweet flavor and helps to make the cake tender. Also, sugar has an important effect on the structure of a cake and cookies. It is very important to follow the recipe for a cake or cookie because changing the amount of any ingredient, especially sugar, affects many other factors. Too little sugar can make a cake or cookie tough. Too much sugar causes the surface to be rough and brown too much and the cake will fall. Sugar should be weighed.

The sugar crystals help to incorporate air when sugar is creamed with fat in some cake recipes.

Ingredient 3: Fat

Purpose in the recipe

Most cake and cookie recipes include some kind of fat. The fat may be margarine, butter, oil, or shortening. Fat in a cake or cookie has several important jobs. The most important job of a fat is to make the cake tender and soft. Fat also helps to improve the keeping qualities of a cake or cookie. Different fats change the texture and tenderness of a cake or cookie. For example, cakes and cookies made with butter are the most tender and have a velvet-like crumb.

Cakes and cookies made with hydrogenated shortening have a more even grain and will rise more than butter cakes or cookies. The hydrogenated shortening helps a cake to rise because it can trap more air bubbles in the batter or dough.

Lowfat margarine, light margarine, whipped margarine, or whipped butter cannot be substituted for the fat in cake and cookie recipes because the amount of fat in the product has been reduced. They will not give a satisfactory product.

Some cake and cookie recipes have reduced the amount of fat and substituted pureed fruit or beans for some of the fat. Applesauce can be used to substitute for some of the fat in a cake or cookie recipe. This can give an excellent product. Cakes and cookies with reduced amounts of fat or no fat should be served immediately after baking since they do not keep well. If the cake or cookies are baked ahead, cool, then wrap securely and freeze until needed.

Try cake or cookie recipes that have fruits or yogurt to replace some of the fat. Prepare the cake or cookies in a 25-portion amount before it is placed on the menu. It can be served as a choice. Take the time to get feedback from students about their taste preferences.

Ingredient 4: Eggs

Eggs in a cake provide some moisture and help to give the cake structure. The recipe may call for whole eggs or yolks or egg whites. When a recipe calls for whole shell eggs, USDA frozen eggs can be substituted.

- 5 pounds of frozen whole eggs = 45 large eggs
- 4 pounds of frozen whole eggs = 36 large eggs
- 3 tablespoons of frozen whole eggs = 1 large egg

Frozen eggs should be thawed in the refrigerator. After thawing, the amount needed for the cake or cookies should be measured and then allowed to come to room temperature before adding to the other ingredients in the recipe. Remember, most cake and cookie recipes suggest that all ingredients should be at room temperature when the batter or dough is mixed.

Ingredient 5: Liquid

Purpose in the recipe

Liquids in a recipe have the job of dissolving the sugar and salt. The liquid mixes with the baking powder in a recipe to produce a gas that helps the batter or dough rise. Eggs provide some liquid also. The liquid in a cake or cookie recipe may be milk, water, juice, or fruit with juice. Nonfat dry milk can be substituted for liquid milk in a recipe. Combine the dry milk with the dry ingredients and add the required amount of water called for in the recipe as "milk."

Some cake or cookie recipes call for sour cream. To reduce the fat, plain nonfat or lowfat yogurt can be substituted for the sour cream. Always use a lowfat or skim milk in place of whole milk to reduce the total fat.

Ingredient 6: Baking Powder

Purpose in the recipe

Baking powder causes a cake to rise because it produces a gas (carbon dioxide) when combined with a liquid and also when the batter is heated. Be careful to measure the exact amount called for in the recipe. Too much baking powder gives a cake a coarse texture, a gummy crumb, and can make the cake fall. Too little baking powder results in a heavy, compact cake.

Be sure to check the expiration date of baking powder. If uncertain, add a small amount of water to some baking powder. If it doesn't bubble, the baking powder may be inactive and should be discarded.

Ingredient 7: Flavorings

Purpose in the recipe

Cake and cookie recipes include a variety of flavorings. Some common flavorings are salt, vanilla, chocolate, spices, lemon extract, almond extract, butter flavoring, and many others.

Although these flavorings are used only in small amounts, they have a big impact on flavor. Measure the flavorings accurately, according to the recipe.

Some cake and cookie recipes call for nuts. Since nuts are high in fat, dried fruits, such as raisins or dates, can be substituted for nuts in the recipe. Substitute equal amounts.