# Icings and Glazes: Ingredients and Preparation

CINGS AND GLAZES are used to coat, fill, and decorate a variety of baked goods such as cakes, cupcakes, tortes, cookies, and Christmas puddings. Sugar is the most commonly used ingredient in icings and glazes and the second is liquid. A layer cake is the most popular iced cake and requires a step-by-step sequential process to ensure a perfectly decorated cake. As you prepare icings and glazes for your baked goods, you are using both art and science: experiment!



### **Objective:**

Prepare icings and glazes using your knowledge of the major types of coatings and the basic ingredients, equipment, tools, and cooking principles.

### **Key Terms:**

albumen bain-marie baker's percentage bittersweet chocolate buttercream icing caffeine cacao chocolate chocolate liquor coating cocoa condensed milk coupler crème fraîche crumb coating crumb the cake

decorating tips double boiler Dutched chocolate emulsified shortening (cake, icing, or highratio shortening) emulsifiers flat icing foam/boiled/meringue icings formula fondant French buttercream frost frosting fudge icing

ganache icing glaze (glacé) glazing ice icing icing comb Italian meringue buttercream lipids marzipan meringue powder milk chocolate mise en place pastry bag petit fours poured fondant



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powdered sugar (confectioners' sugar, icing sugar) recipe rolled fondant rose or flower nail royal icing saccharide salt salted sweet cream butter scaling semisweet chocolate seven minute icing/ frosting simple buttercream simple syrup sweet dark chocolate Swiss meringue buttercream tip brush unsalted sweet cream butter unsweetened chocolate (baking chocolate) vegetable shortening whipped cream icing white chocolate

## Icings and Glazes: Ingredients and Preparation

A **coating** is a covering for a dessert or other foodstuff. There are nine icing and glaze coating categories: flat, butter, foam/boiled/meringue, royal, fondant, fudge, ganache, whipped

cream, and glaze (glacé). Each type is differentiated by its consistency (texture). The three main functions of icing and glaze coatings are to:

- Add flavor and richness to the dessert and interest to the surface.
- Develop the dessert's appearance and suggest special occasions.
- Improve the keeping quality of the dessert by the addition of moisture and flavor.

The most common way cakes and other pastries are moistened



FIGURE 1. Coatings for icings and glazes have three main functions. Which functions are evident on this iced lemon pound cake?

following baking is by the application of simple syrup. **Simple syrup** is a mixture of 1-part sugar (by weight) to 1-part water (by weight), boiled for 1 minute. When cooled or lukewarm, simple syrup is brushed onto dry cakes (usually sponge types) to moisten and flavor. It is also used to make ice creams and sorbets, to glaze pastries, to thin liquors, to dilute chocolate or food colorings, and to make meringues, caramels, raspberry mousse, and more. Simple syrup can be stored refrigerated for 1 to 2 weeks.



**Icing** is a sugar coating used to decorate cakes, buns, cookies, bars, etc. In its most basic form, an icing is a mixture of sugar and liquid. It is that missing element, "the icing on the cake," that provides the artistry and the finishing touch to a perfect baked good.

**Frosting** is the American term for icing: a thick and fluffy sweet mixture, cooked or uncooked, for coating or filling cakes, cookies, and other baked items.

**Glazing** is a broad term for several dessert coatings: sugar-icing-syrup coatings cooked to the 'crack' stage that harden when cold, water icings (sugar and liquid), melted chocolate with cream or other additives (think of ganache), or sieved jams and jellies that gelatinize on the dessert's surface (think aspic and other fruit-based glazes). Glazes are the thinnest of the coatings when prepared.

Baking is science. Bakers use formulas to ensure consistent products. A baking **formula** measures ingredients by weight in pounds and ounces or kilograms or milligrams: a general sci-



FIGURE 2. Based on the coating definitions for "icing, frosting, and glazing," how has this chocolate spice cupcake been coated? Describe how you came to your answer.

ence and math construct that shows the relationship between given quantities. Weight measurement is essential when flours and sugars (anything sifted) are added to a baking formula. In contrast, a baking **recipe** measures ingredients by volume: teaspoons, tablespoons, cups, dashes, and pinches, which are perfectly fine for small batches. For example:

**Scaling** is the baker's term for weighing out ingredients. Accurately measuring 4.54 cups of cake flour by volume is, at best, a guess, whereas accurately weighing 1 pound of cake flour is very precise. In baking and pastry formulas all ingredients are based on percentages (ratios), and the percentages are what allow one to scale the batter or dough up or down (doubling, tripling, etc.).

**Baker's percentage** (or formula percentage) is a conventional way to list ingredients in dough in which the quantity of each ingredient is expressed as a percentage of the total amount of flour. For example: 1000g flour, 660g water, 20g salt, 10g yeast is expressed in baker's percentage as 100% flour, 66% water, 2% salt, 1% yeast. In a baker's formula all amounts are expressed in percent of the total flour weight, although the correct term is "ratio" as the percentages always add up to more than 100%. If a formula calls for 4 pounds of flour, then 4 pounds = 100%. In the same formula, two ounces of baking powder = 3.1% of the total flour weight. The reasons to use baker's percentage include:

• Enables the baker to work with precision using only one unit of measure;

- Easy to scale a formula up or down (doubling, tripling, etc.);
- Easy to compare which formula is drier, sweeter, or saltier;
- More accurately measures uniformly an ingredient—such as eggs—in which the quantity per unit may vary; and,
- Serves as a common language among all bakers and baking operations.

### BASIC ICING AND GLAZE INGREDIENTS AND EQUIPMENT

### Ingredients

### SUGAR (sucre)

**Description:** Sugar is the most commonly used ingredient in icings and glazes. Sugar is a sweet substance made from carbon, hydrogen, and oxygen molecules; a carbohydrate that is soluble in water that produces with a sweet taste. **Saccharide** is the scientific name for the organic compound sugar.

Raw cane sugars—turbinado, demerara, and muscovado—are popular unrefined, molassessoaked sugars. The most refined is turbinado, then demerara, and finally, muscovado: each indicates its molasses strength by its color (turbinado is lightest and muscovado is darkest).

Liquid sweeteners include honey, molasses, corn syrup, and various manmade liquid sugars produced initially for dietary purposes. Liquid sugars do not react in baked goods in the same fashion as solid sugars. Consult a reference to substitute liquid for solid sugars.

**Powdered sugar (confectioners' sugar, icing sugar)** is granulated sugar crushed to a fine powder, bright white, and contains 3% cornstarch to prevent clumping. When powdered sugar is measured, rather than weighed, it is measured as for flour (e.g., Spoon into a measuring cup and level, rather than scooping into the cup.)

Sugar by volume (cups) may seem comparable (e.g., a cup is a cup) but sugar by weight is not. For example:

- 1 cup granulated sugar weighs about 7 ounces
- 1 cup confectioners' (powdered) sugar weighs about 4 ounces
- 1 cup packed brown sugar weighs about 7½ ounces
- 1 cup molasses, honey, or corn syrup weighs about 12 ounces

Functions: Sugar provides the following functions to icings, and glazes:

- Flavor
- Tenderizes
- Colors (caramelizes; aids in browning meringues)



- Moisture retention (sweetened baked goods, icings, and glazes stay moist longer than unsweetened types)
- Cause icings and glazes to spread

Nutrient: Sugar is 100% carbohydrate.

### LIQUID

**Description:** Liquid is the second most commonly used ingredient in icings and glazes. Icings and glazes use various types of liquids, including: water, milk, heavy cream, sour cream, crème fraîche, fruit purées, and fruit juices. Sour cream has a fat content of about 20% and may include additives, such as gelatin, rennin, and vegetable enzymes to stabilize the mixture and thicken it. **Crème fraîche** is naturally thickened and soured cow's cream that consists of 30% fat and no added thickeners. It is thicker, richer in flavor, and less tangy than sour cream. It can be whipped in the same manner as heavy cream and does not curdle when heated (as does sour cream).

Milk is often used to thin frostings and glaze. Heavy cream is used to make ganache.

**Functions:** The functions of liquid in icings and glazes are:

- Moisture (also used to "thin" icings and glazes to appropriate consistency)
- Flavor (dairy (adds tartness), fruits, juices, liquors, etc.)
- Color (from milk and fruit sugars, fruit juices, etc.)
- Steam leavening (from the conversion of liquid to steam in cooked icings)
- Binds icing and glaze ingredients together

### FAT (graisse)

**Description:** Fats are greasy ingredients that melt at low temperatures. They are the third most commonly used ingredient in icings and glazes. Fats are compounds of carbon, hydrogen, and oxygen (the same three molecules as sugar). Lipids are dietary fats that include fatty acids, triglycerides, and cholesterol: lipid is the scientific term for fat. Fats are very concentrated body fuel and help to supply energy and build body tissue. Fat is found in animal (butter, lard) and vegetable (peanut, palm, corn, canola, olive, shortening) tissue. Solid fats (butter, margarine, hydrogenated products) remain solid at about room temperature. Oils remain liquid at about room temperature and may solidify when refrigerated. The process to create hydrogenated shortenings also produces trans fatty acids that may cause a health risk. Shortenings are 100% fat. Common fats used in the production of icings and glazes include:

• **Vegetable shortening** is a solid (plastic) fat made from purified oils (soybean, peanut, corn, and cottonseed) that have been hydrogenated. Hydrogenation is a process of adding hydrogen molecules under pressure that 1) solidify the liquid vegetable oils, 2) absorb the oxygen in the oil's free fatty acids to convert them to fats that are solid at room tempera-



ture. Some shortening may have added animal fats, emulsifiers, colorings, and flavorings (butter). Hydrogenated fats provide more volume for baked goods than butter.

- Emulsified shortening (cake shortening, icing shortening, or high-ratio shortening) is an all-purpose hydrogenated shortening with one or two combinations of emulsifiers added. Emulsifiers blended into a shortening help in the formation of an emulsion by allowing the baker to add more liquid and sugar to the icing mixture than all-purpose non-emulsified hydrogenated vegetable shortenings would allow. They promote a finer texture, help keep products moist, and stabilize the icing mixture. Emulsifiers are additives that reduce the tension between oil and water and improve softness, texture, stability, volume, and shelf life. As butter contains no emulsifiers, its fat is more difficult to hold in suspension than icings and glazes made with emulsified shortenings.
- Salted sweet cream butter is a product of churning (agitating cream to separate fat and water) fresh, sweet cream and is 80% fat with some added salt. European butters contain up to 86% fat. Unsalted sweet cream butter has the same make-up as salted butter with no added salt. Water and some milk solids comprise the remainder of butter's content. Butter is different from shortening in two major ways: it enhances flavor and also the quality of "melting in the mouth."

Functions: The functions of fats in icings and glazes are:

- Flavor and richness from butter (hydrogenated shortenings are often tasteless)
- Moisture
- Shortens (tenderizes)
- Traps air (during creaming) that adds volume and a fine texture to the mixture
- Emulsifies two liquid ingredients
- Carries an added flavor (vanilla, almond, etc.) throughout the icing

**Nutrients:** Hydrogenated shortening is 100% fat. Commercially prepared butter is about 82% fat, 16% water, and 2% milk solids (and some contain salt). Butter also contains vitamin A.

### EGGS (oeufs)

**Description:** Egg whites (**albumen**) are the portion of the egg most often used in icing recipes/formula, but some do call for whole eggs or egg yolks.

Grade AA large chicken eggs (about 2 ounces each or 8/pound) are the most common size used in baking and pastry products. Eggshell color does not affect the functions eggs provide in baking and pastry products.

Weighing eggs (separated fresh, liquid egg whites, and powdered egg whites (meringue) is more accurate than measuring.

- 1 large egg white = about 1 oz. = about 2 tablespoons
- 1 large egg yolk = about  $\frac{1}{2}$  oz. = about 1 tablespoon



Powdered egg whites are reconstituted as: 1 fresh egg white = 2 teaspoons egg white powder + 2 tablespoons warm water. **Meringue powder** is pasteurized powdered egg whites with sugar and additives used to make long-lasting, hard-drying royal icing (e.g., strengthens and stabilizes gingerbread house decorations, uncooked icings, meringues, and mousses, buttercream and whipped cream icings and decorations, and sugar molds).

A fresh egg sinks to the bottom of a bowl of water and has a nicely rounded yolk that is well centered in the white.

Cracked eggs present a danger of Salmonella entrance and should be discarded.

Functions: The functions of eggs in icings and glazes are to:

- Leaven (via trapping air bubbles)
- Structural framework for some cooked icings (Egg whites contain lecithin, a protein that lines the outside of the air bubbles created during beating and prevents them from collapsing during baking)
- Emulsification (eggs act as a binding agent, a structure that holds other ingredients together; eggs are second to flour in providing structure to baked goods)
- Moisture
- Color (egg yolks and whole eggs provide color)
- Flavor (eggs add a distinctive taste)
- Texture
- Thickening

**Nutrients:** Eggs are a valuable source of vitamins A and B and a fair source of vitamin D. The protein "albumin" is found in egg whites. The egg white contains the majority of the egg's nutrients: niacin, riboflavin, magnesium, potassium, and sodium. There is no fat in an egg white.



FIGURE 3. Two facts about the chemistry of eggs: 1) Eggs are easiest to separate when they are cold. 2) To beat whole eggs or egg whites to their greatest volume bring to an internal temperature of  $65^{\circ}$  to  $75^{\circ}$ F.

### FLAVORING (parfum)

**Description:** Flavorings and aromatics are used in icings and glazes in small quantities to "give relish" to foods. Flavorings include extracts (concentrated oils or essences diluted with alcohol) and concentrated oils that are derived from liquid natural flavors (vanilla, almond, cherry), seeds and beans (vanilla, nutmeg, chocolate, coffee), and spices (epices: cinnamon, ginger, cloves, etc.).



**Chocolate** is the general term used for the products of the cacao bean. All chocolate is made from **cacao** (kah-KOW) beans that are fermented, roasted, and hulled to produce numerous chocolate varieties. During the production process, cacao nibs are ground until the fat in them liquefies. Then **chocolate liquor** is unsweetened chocolate consisting of cocoa solids and cocoa butter. It is a semisolid mass that is cooled and placed into molds called "slabs."



FIGURE 4. All chocolate is made from cacao beans that are fermented, roasted, and hulled to produce numerous chocolate varieties. Cacao beans grow in a cacao pod. Notice the color difference between the fresh and the roasted cacao beans.

- Chocolate contains two saturated fatty acids (palmitic and stearic) and one monounsaturated fatty acid (oleic).
- An **antioxidant** (polyphenol) is a substance that inhibits the effects of oxidation than can damage cells in the body. They are a health benefit of chocolate and wine consumption.

**Cocoa** is the substance left after the cocoa butter has been extracted from the chocolate mass and powdered. It is used to add chocolate flavor to baked goods, candies, custards, puddings, icings, and glazes. Cocoa is less expensive than slab chocolates and equal in nutrition. Very little sugar is found in natural cocoa; most is added during manufacture.

- Cocoa contains a mild stimulant, theobromine an alkaloid. An **alkaloid** is a large group of organic substances found in plants that are colorless, bitter tasting alkaline substances; the most common of which is caffeine. **Caffeine** is an alkaloid found in seed plants such as cacao. Cacao beans, made into cocoa, naturally contain one percent theobromine or a low amount of caffeine.
- Nutrients in cocoa and chocolate include essential minerals such as small quantities of magnesium, calcium, iron, zinc, copper, potassium, and manganese. Cocoa and chocolate also contain vitamins A, B-complex, C, and E.

**Unsweetened chocolate (baking chocolate)** is 100 percent pure chocolate liquor made from ground cacao beans with no added sugar. It contains 45 to 55% fat. Because the cacao beans are half cocoa butter (the vegetable fat from cacao bean) and half cacao solids, unsweetened chocolate has a deep and rich flavor. However, it is bitter in taste, and is best combined with sugars and milks to produce a palatable product. It is the base of all chocolate products except white chocolate.

**Bittersweet chocolate** is the darkest eating chocolate, with a deeper flavor than sweet dark or semisweet chocolate. Bittersweet's sugar content is not regulated by the government,



which may make some varieties sweeter than semisweet chocolate. Bittersweet chocolate is 35% cacao solids and 50 to 80% chocolate liquor. Its fat content is 33 to 45%.

**Semisweet chocolate** is an American term associated with chocolate chips and other bars. It is generally presumed to be sweeter than bittersweet varieties and "darker" than sweet dark chocolate varieties. Semisweet chocolate contains 35% cacao solids and is 20 to 35% fat.

**Dutched chocolate** is produced from chocolate liquor or cocoa powder that has been treated with alkaline salts to give it a darker color and a milder flavor. There are two types of cocoa powder: natural and Dutched. Natural cocoa is pressed until all butterfat is removed, leaving a bitter and slightly acidic product. Dutch-processed cocoa adds an alkali that removes the acidity. Dutched chocolate is chocolate liquor or cocoa powder treated with alkaline salts and its fat content is about 15% on average and less than 50% overall.

**Sweet dark chocolate** is produced with very few milk solids and a high cocoa butter content. It is composed of 15 to 35% chocolate liquor, 20 to 40% cacao solids, and less than 12 percent milk solids. Sweet dark may contain **condensed milk** (milk thickened by evaporation and sweetened), cocoa butter, sugar, and vanilla. Its fat content is 50 to 70%.

**Milk chocolate** is chocolate liquor that is lighter in color than other chocolates with a weaker chocolate flavor. It is 20% cocoa butter, 14% milk solids (condensed milk or dry milk), and up to 55% sugar. Milk chocolate has a fat content of 10 to 12%. [NOTE: In the U.S., the minimum fat content for chocolate products is 3.39%.]

White chocolate is a baking and candy product that contains no cacao solids or chocolate liquor and as a result has no chocolate taste. It gets its name from the cocoa butter it contains.

White chocolate contains a blend of 20% (minimum) cocoa butter, 14% milk solids, and up to 55% sugar, plus flavorings. Its fat content is 20% or more.

**Functions:** The functions of flavoring in icings and glazes are to:

- Enhance or fundamentally change the taste of icings and glazes
- Chocolate adds flavor, texture, and shine



FIGURE 5. Based on the descriptions of each chocolate, identify the chocolates pictured here.

### SALT (sel)

**Description: Salt** is a crystalline compound (NaCl sodium chloride) primarily used as a condiment that comes in two types: sea salt distilled from seawater and rock salt found in the earth. Sodium chloride is the first salt discovered by humans and is typically called table salt. Iodized salt (table salt with added iodine) is the type most often utilized in baked goods.



Functions: The functions of salt in icings and glazes are to:

- Flavor (adds complexity (without it you would primarily taste sugar) and heightening the flavor of other ingredients)
- Toughen the texture of soft fat-and-sugar mixtures

**Nutrient:** The nutrient in salt is sodium.

### LEAVENING

**Description:** Leavening is the production of a gas in an icing using an agent: air and eggs (a natural leavener). A leavening agent is a substance that causes expansion. In the case of icings and glazes, leavening is primarily due to air incorporation during creaming of fat and sugar and the whipping of eggs and cream or crème fraîche. Mechanical incorporation of air occurs during creaming, beating, whipping, folding, etc. and results in greater volume for icings and some glazes. Vigorous mixing entraps air and creates bubbles that produce foam. The function of air leavening in icings and glazes is to cause greater volume to each mixture that is creamed, beaten, whipped, folded, etc.

### **OTHER COMMON INGREDIENTS AND TOPPINGS:**

Citrus and other juices, nuts, chips, coconut, fresh and puréed fruit juices, etc. Cream cheese is a soft mild-tasting fresh cheese made from milk, cream, and stabilizers (carob bean gum and carrageenan). It is often used in icings for carrot, zucchini, banana, coco-

## **DIGGING DEEPER...**

### UNCOVERING ADDITIONAL FACTS: Natural Icing Colors and Flavors

Food colors can leave an undesirable taste. Consider using juices, such as orange or cranberry, or cocoa powder to color your icings. See the KitchenLane article and recipe, "Painted Daisy Cookies With All Natural lcings," for ideas to ice daisy cut out cookies at <u>http://kitchenlane.com/2013/08/painteddaisy-cookies-all-natural.html</u>.



What icing flavor would you create for these daisy and tulip gingerbread cutout cookies?



nut, chocolate, pumpkin, etc., cakes and quick breads. It is often added to icings and glazes for its distinct flavor and texture. Cream cheese nutrients include vitamin A, potassium, and sodium.

Common icing and glaze toppings include: nuts, sprinkles, candies, coconut, fruit, chocolate curls, edible flowers, etc.

### **Equipment and Tools**

Stand mixer with paddles and whips—Stand mixers sit on a tabletop or on the floor and have several attachments (flat beater, dough hook, wire whip). Icings and glazes primarily use the flat beater (creaming) and the wire whip (whipping, beating) attachments.

Scales—platform, digital, or balance types—are used to accurately measure ingredients. Platform scales are often used to measure moist ingredients, balance scales to measure dry ingredients, and digital scales to measure small amounts (spices, herbs, leavening agents, etc.) and for portion control (e.g., each cupcake requires 2 ounces of icing).

Double boiler and bain-marie—A **double boiler** is two pans that nestle together: the bottom pan is filled half full or less with simmering water and the top pan holds the ingredients. Typically, the top pan does not touch the simmering water. A **bain-marie** is a hot water bath (bain is the French term for "bath") used to keep foods warm. In many icing and glaze preparations (especially cooked icings and glazes) a bain-marie is used to hold or melt an ingredient "over" simmering water, such as chocolate, fruit purée, or glaze toppings.

Candy or sugar thermometers (for cooked frosting)—Candy thermometers are used to accurately measure the temperature stages of cooked sugar for icings and glazes: thread, softball, firm-ball, hard-ball, soft-crack, and hard crack.

Pastry brush—Bakers use scrupulously clean pastry brushes to remove crumbs from cakes and other baked goods before icing or glazing.

Spatulas—Numerous spatula types are available, most are used for stirring, scraping, placing icing in pastry bags, and/or icing.

- Wooden spatulas are very practical for stirring cooked icings. Bakers often prepare chocolate mixtures, sauces, and glazes with a wooden spoon/spatula.
- Rubber scrapers are used to remove all traces of icing and glaze mixtures from a bowl or vessel. They are also used to gently fold beaten egg whites and/or meringue into an icing or some glazes.
- Metal icing spatulas (e.g., palette knives; straight and offset) are broad, flat tools used to ice (frost) all types of cakes and pastries.

Long-handled spoons—Long-handled spoons, usually wooden or silicone types, are used for stirring icings and glazes as metal spoons easily transfer heat and become too hot to hold.

Hand whips—A metal-handled, multi-wire whisk is used to incorporate air into various products such as eggs or heavy cream.



Cake decorating equipment:

- Pastry bags (cloth, paper, plastic)—A **pastry bag** (decorating bag or piping bag) is a cone-shaped device with two openings, one large opening at the top to deposit icing, and one smaller opening at the bottom, to fit a decorating tip. The point of the cone is snipped off to accommodate a decorating tip. It is used to pipe (apply) decorations to a cake or pastry. Decorative shapes are created by the size and configuration of the decorating tip (e.g., plain, star, leaf, rose, etc.)
- A **coupler** is a grooved insert and retainer ring that attaches decorating tips to the pastry bag. The coupler consists of two sections: the base and the ring. The coupler base is placed inside the pastry bag, a decorating tip is attached, and the ring holds the tip in place. To change tips, the ring is removed and a new tip attached.
- **Decorating tips** (piping tips) are small specially shaped metal cones with open ends to form icing designs and decorations when icing is pressed through them. Each tip has a different number and common numbering formats are from Ateco® and Wilton®. For example, Ateco® tips 16 through 22 are star shapes in various sizes. These tips come in several categories:
  - Round tips are for outlining, figure piping, making dots, and for writing.
  - Leaf tips are used to produce leaves on floral sprays and arrangements.
  - Drop flower tips create a flower with "one squeeze" and can produce individual plain flowers or swirled flowers.
  - Star tips, both open and closed style, create borders of many types, rosettes, shells, reverse shells, icing a cupcake or cookie, and small star tips can be used for lettering.
  - Rose tips create multi-petal roses, daisies, daffodils, pansies, rose buds, ribbons, bows, and ruffle borders. A rose tip is typically used in conjunction with a rose nail. A **rose or flower nail** is a round, flat surface attached to a "nail" that is finger-held and rotated enabling the baker to turn an icing flower while creating it.
- An **icing comb** is a metal (or plastic) triangle-shaped tool with toothed or serrated edges (of various widths and depths) used to decorate/texturize cake sides or tops.
- A **tip brush** is a device used to remove clogged icing from tips prior to washing.
- Airbrush—An airbrush is an artist's paint gun used to spray food coloring finely and evenly over cakes, cupcakes, cookies, etc. Airbrush technique is often used to create a photographic representation of a person, place, or thing.

Parchment paper or waxed paper—Parchment or waxed paper placed on a cake plate or cake stand and is removed after decorating to keep the bottom edge "clean." It is also attached to a flower nail for easy release of floral decorations from the nail. Triangular-shaped parchment paper is also used to create a disposable pastry bag.

Cake boards and cake rounds—Cake boards are corrugated cardboard sized to provide a base for standard size cakes. Rounds are available in common sizes (6-, 7-, 8-, 9, 10-, 12-inch) and rectangular and square boards are available for sheet cakes. Cake boards and circles are available in waxed, unwaxed, patterned, or ruffled styles.



Turntable, lazy Susan, or an inverted bowl—All of these tools are revolving cake stands that assist the baker to more easily ice and decorate a cake, cookie, cupcake, or other dessert.

Cake dome—A domed-shaped cover fastened to a base that holds iced/glazed cakes in airtight room temperature or refrigerated storage.

Culinary blowtorch—A culinary blowtorch is typically 5 to 7-inches tall and is powered by butane or propane gas. This device browns meringue icing and sugar crusts immediately prior to service. (Meringue icing and broiled topping can also be browned in a 400°F or higher oven.)

### PREPARE ICINGS AND GLAZES

### Icing and Glaze Coating, Base, and Consistency

To **ice** is to cover a cake or pastry with icing/frosting, usually using an offset spatula and/or using piping bag with tips or poured. To **frost** is to cover a cake or pastry with icing/frosting, usually using a spatula or spoon. To **glaze (glacé)** is to cover a cake or pastry with a smooth and/or shiny finish, usually by pouring or by drizzling. Culinary websites differentiate between icing, frosting, and glaze based on the coating's thickness, base ingredients, and consistency. [NOTE: Any icing prepared with confectioners' (powdered) sugar is sweeter and requires more sugar than icings prepared with granulated sugar or cooked syrup.]

Icing and glaze base and consistency:

- Frosting is the thickest, creamiest, and sweetest coating. The base for frosting is butter or cream: it has a buttery taste. The consistency is thick and fluffy.
- Icing may be applied with a spatula and/or "poured over" a cake to coat. The base for icing is sugar. Icings have a sugary taste and a smoother appearance than frosting and use cake decorating tools and tips. The consistency is firmer than frosting and thicker than glaze.
- Glaze is the thinnest coating: typically a syrup consistency. The base is sugar syrup; also aspic, sieved jams, jellies, egg wash (plus heat), etc.
  serves as glaze for cakes and pastries.
  Bakers work quickly with cooked sugar glazes, as some set-up almost immediately upon being applied.



FIGURE 6. Based on the definitions for frost, ice, and glaze, which coating type was used on this yellow cake? Could there be more one answer to this question?



Glazes give food a smooth, shiny, often transparent finish. The consistency is thinner than frosting and icing mixtures.

### Nine Basic Coating Types

FLAT: **Flat icing** is a simple coating prepared with just a few ingredients: often powdered sugar and water. A typical flat icing for sweet rolls and other pastry is prepared by beating together powdered sugar, corn syrup, liquid (including fruit juices), and a flavoring (or spices) and heating to 100°F in a double boiler. This quick pastry and cake glaze can be flavored with spices or fruit juices. Flat icing is stored covered with a damp towel or plastic wrap and is reheated in a double boiler.

BUTTER: **Buttercream icing** is a coating prepared by creaming together butter or shortening, powdered sugar (confectioners'), and vanilla to a fluffy and light consistency. It is one of the most popular cake coatings in the U.S. Some buttercream icings use eggs that add richness to the flavor. These icings vary from thin, to medium, to stiff based on intended use. The longer buttercream icing is beaten, the fluffier it becomes by trapping more and more air bubbles in the mixture. Stiffened buttercream icing is often used to create cake decorations and especially flower decorations. Buttercream icings tend to be unstable in warm weather and crust under refrigeration. They are stored covered with plastic wrap to avoid crusting. There are several types of butter icings including:

- **Simple buttercream** is a quickly prepared, smoothly blended icing of room temperature fat (butter or shortening), powdered sugar, salt, flavoring (vanilla, almond, etc.), and liquid (milk, coffee, water). Simple buttercream does not overbeat and is often used for casual cake decorating. In contrast, most icing prepared for cake decoration (e.g., pastry bag and tip) is made with all or part shortening (rather than butter). Variations include: cream cheese, chocolate, caramel, butterscotch, mocha, orange, etc.
- German chocolate cake frosting is another variation of French buttercream made with granulated sugar, evaporated milk, butter, and eggs or egg yolks cooked together until thickened. Then, pecans and shredded coconut are added to the mixture. This frosting is normally placed between layers and atop of the cake but not the sides.

FOAM/BOILED/MERINGUE: **Foam/boiled/meringue icings** are cooked syrups that use egg whites to create a fluffy, glossy, sugary icing. Most are syrup mixtures of sugar, glucose, and water boiled to about 240°F and then added to an egg white meringue. Some are mixtures of egg whites, sugar, and water cooked together in the top of a double boiler and beaten with a hand held electric mixer until quadrupled in volume, stiff, and glossy. [NOTE: As sugar syrup cooks, water boils away the sugar concentration increases, and the temperature rises. The highest temperature the syrup reaches tells the baker how the syrup will perform when cooled. For example, sugar syrups cooked to soft-ball stage (235°F) form a soft ball when dropped in cold water. The cooled syrup will be thick and gum-like in appearance and texture. Exercise CAUTION when working with sugar syrup mixtures.] Foam icings are used the same day as prepared and applied as for a meringue pie topping by spreading and peaking the



mixture or by piping the mixture onto cakes and pastry. Often this icing is browned with a chef's blowtorch or by baking in a 400°F oven until the tips are browned. Baked Alaska uses a type of meringue icing. There are several types of foam/boiled/meringue icing including:

• Seven minute icing/frosting is a foam coating mixture that is 100% fat free and contains beaten egg whites, granulated sugar, and water: a mixture similar to meringue but more stable and sturdy enough for piping. The ingredients are cooked in a double boiler while being continuously beaten with a hand held electric mixer for seven minutes or until the temperature reaches 140°F. Seven minute icing has a gooey marshmallow texture, a delicate flavor, and a very light texture. This icing hardens quickly which requires that the cake to be iced be ready before the baker prepares the icing. It is a delicate frosting easily absorbed into the cake and best eaten within several hours of preparation and application. Seafoam icing is seven minute icing variation that substitutes brown sugar for

granulated sugar. French. Italian, and Swiss buttercream icings all use eggs and no powdered sugar. It is highly recommended to use a stand mixer when preparing French, Italian, and Swiss buttercream icing as each requires about 20 minutes of whipping. Temperature is very important when preparing these buttercream icings; following the instructions closely and using a candy thermometer are necessary to achieve standard products.



FIGURE 7. This baked Alaska dessert is coated with meringue icing and then browned with a culinary butane torch.

- **French buttercream** is a classic icing made with cooked sugar syrup and an egg-yolk foam that produces a rich, creamy color. The preparation begins with room temperature ingredients and heating granulated sugar, water, and cream of tartar until the sugar dissolves (creates a smooth, non-gritty syrup). Then, the sugar mixture is cooked uncovered until the syrup reaches soft-ball stage (238°F) on a candy thermometer. Next, egg volks are beaten until thickened and the heated syrup is beaten into the egg mixture in a thin, steady stream. Now the mixture (syrup and egg yolks) is heated again until it reaches 160°F. Finally, butter is beaten into the mixture one tablespoon at time until the icing is smooth and spreadable. French buttercream has a light consistency and is less stable than Italian or Swiss buttercreams but it is the tastiest (due to the egg yolks). This buttercream does not pipe as well as other meringue icings.
- **Italian meringue buttercream** is a icing mixture of hot sugar syrup (240°F) poured over whipped egg whites and whipped until the mixture cools. Then, butter is added one tablespoon at a time until an airy icing is achieved. It is a variation of French buttercream that uses boiled simple syrup rather than granulated sugar. [TIP: Pouring the hot syrup



into the egg whites is best accomplished away from the edges of the stand mixer bowl as touching the metal or glass bowl can cause the hot syrup to harden prematurely.] It is an easy buttercream to pipe into decorative shapes and designs.

Swiss meringue buttercream is an icing mixture composed of a meringue into which large amounts of butter are beaten in small increments until the mixture is smooth, fluffy, and glossy. [NOTE: It is very similar to Italian meringue buttercream, as they both use egg whites, and then large dollops of meringue are beaten into large amounts of butter.] Again, all icing ingredients are at room temperature. First, the egg whites, granulated sugar, water, and cream of tartar are beaten on low speed over simmering water until the mixture reaches 140°F. Then, the mixture continues to be beaten on high speed until it reaches 160°F. Finally, large dollops of meringue are beaten into large amounts of butter until the mixture is smooth, fluffy, and glossy.

ROYAL: **Royal icing** is a hard coating made from beaten egg whites, icing (powdered) sugar, and a liquid (usually lemon or lime juice) that creates a hard, brittle texture. It is pure white (or tinted) sticky icing that dries hard and is used to decorate gingerbread houses, make decorative sugar sculptures, and cake decorations. Royal icing is often made from meringue powder or dried egg white powder, powdered or confectioners' sugar, cream of tartar. and varied amounts of water and is easily tinted. Sometimes glycerin is added to soften it. Royal icing is piped from decorat-



FIGURE 8. The gingerbread house shingles, snow, icicles, and all trim are created with royal icing. The base, front, back, sides, and roof are all constructed (attached to each other) with royal icing. Gingerbread house bakers call royal icing "cement."

ing bags to create lattice designs, beads, bows, flowers, fruits and vegetable shapes, and cartoon "googley eyes." Desserts made with royal icing dry hard and last for months. The texture of royal icing (brittle and sometimes a bit gritty) does not make eating it desirable. When not in use, royal icing is covered with a damp cloth.

FONDANT: **Fondant** is a sweet, rich, elastic, white icing made from sugar, glucose, and water that hardens when exposed to the air. The basic preparation is cooking a mixture of sugar, glucose, and water to a temperature of 240°F and letting it cool to 150°F; then mixing until it is creamy and smooth. Next, it is rolled out and draped or is poured over a cake or pastry. Fondant is time consuming and can be difficult to make. Most fondant made from scratch is produced on a stand mixer. If a stand mixer is not available, the baker can use a hand mixer to begin the process and then complete the majority of the mixing by kneading until



## **FURTHER EXPLORATION...**

### ONLINE CONNECTION: How to Make Rolled Fondant to Cover All Cake Shapes

Rolled fondant (also called sugar paste) is often used to create an elegant and smooth cake surface. See the Gemma's Bigger Bolder Baking website video, "Homemade Fondant," at http://www.biggerbolderbaking.com/ how-to-make-rolled-fondant/. Then, watch the next of Gemma's videos, "How to Make Marshmallow Fondant & Decorate a Cake," at http://www.biggerbolderbaking.com/ how-to-make-marshmallow-fondant/. It's a three-ingredient recipe rolled to a thickness of 1/4- to 3/8-inch. You can place either fondant on round layer, tiered, or square cakes. One tool you will note in the videos is a "smoother" to help create the perfectly shaped coating on top and sides. Finally, watch the Vimeo video, "How to Cover a Square Cake with Sugarpaste/Fondant," at https://vimeo.com/298002. Take special notice about the technique to create square corners by "cupping" the fondant into place.



Rolled fondant produces smooth "porcelain" looks for specialty cakes. Rolled fondant consistency remains soft but has little flavor.

smooth. Once prepared, fondant must be kept covered with a thin coating of water or plastic wrap and stored in a cool location.

 Rolled fondant is an icing frequently used to cover wedding or specialty cakes to produce a "porcelain" look. The cake to which rolled fondant is applied must be firm (butter, pound, or fruit), and lightly covered with a fruit glaze, buttercream icing, or marzipan to ensure the fondant properly adheres to the cake. Rolled fondant consistency remains soft but has little flavor. [NOTE: Marzipan (almond paste with a doughlike consistency) is similar to



FIGURE 9. These Easter cupcakes feature buttercream "grass" topped with rolled fondant bunnies and chicks.



rolled fondant. It can be made from scratch or purchased; then rolled and applied as for fondant.]

 Poured fondant is an icing that creates a very sweet, smooth, satiny finish for cakes and petit fours. Petit fours are small, decorative, and layered bite-size cakes often covered with poured fondant icing.

FUDGE: **Fudge icing** is rich, heavy icing prepared in a similar fashion to fudge candy. Granulated sugar, milk, butter, and chocolate is cooked to soft-ball



FIGURE 10. Poured fondant seals in freshness and dries to a semi-hard and smooth finish. Then, the petit four is decorated.

stage. Then, the fudge mixture is cooled before beating with a mixer to add air and lightness. This pourable icing is used warm and used quickly. When necessary, fudge icing is reheated in a double boiler or bain-marie. Store covered with plastic wrap under refrigeration.

GANACHE: Ganache icing is a French term for a rich chocolate emulsion of heavy cream and chocolate used as a filling, an icing or glaze, and as a candy truffle base. It's prepared by heating heavy cream and chocolate until the chocolate melts. The better the chocolate, the better the ganache. Ganache icing is easy to prepare and whipped ganache produces a fluffy icing especially nice for piping on cupcakes. The same mixture proportions are pourable at 85°F and spreadable at room temperature. A variation with a buttercream consistency is



FIGURE 11. Light ganache is used as a thin glaze to coat cakes and pastries: a 1:1 ratio (weight) of chocolate to heavy cream. Firm ganache is beaten until fluffy and stiff and used as icing or filling and/or as a truffle base: a 2:1 ratio (weight) of chocolate to heavy cream. Which ratio ganache was used to fill this torte: light or firm?

ganache beurre: softened butter whipped into a ganache base. In all applications, the use of high quality chocolate makes a better tasting ganache.

WHIPPED CREAM: **Whipped cream icing** is made from powdered sugar, flavoring, chilled heavy (whipping) cream, and a stabilizer (to prevent the icing from separating). Pow-



dered sugar contains some cornstarch that helps to stabilize the icing; or, additional cornstarch may be added to the mixture. Whipped cream is also stabilized using unflavored gelatin that gives the mixture a mousse-like texture. Gelatin also prevents weeping (bleeding of water from the cream).

GLAZE: To glaze (glacé) is to cover a cake or pastry with a smooth and/or shiny finish, usually by pouring or by drizzling. Glazes are the thinnest of the coatings when prepared; some are as simple as water glaze types (e.g., powdered sugar and liquid). They give desserts a smooth and/or a shiny surface as well as seal in moisture. Common glazes include:

- Melted chocolate (often in combination with cream, butter, and/ or sugar syrup)
- Water icings (sugar and liquid)
- Sieved fruit jams (or melted jellies) for tarts; aspic
- Pourable fondant icings (thick and opaque)
- Caramel
- Sugar-icing syrup cooked to 'crack' stage is brittle and gives products sheen
- Pastry glaze brushed on prior to baking (egg wash; milk, cream, or butter; sugar sprinkled over pastry, etc.)

### **Cake Decorating Tips**

MISE EN PLACE: Follow "mise en place" rules when working with icing and glaze. **Mise en place** is a French cooking term that literally means everything in its place. A baker who observes the mise en place rules would:

- Read the entire icing or glaze recipe.
- Collect all the ingredients.
- Conduct processes requested by the recipe including: chill a stainless steel bowl in the freezer to whip heavy cream, ensure other ingredients are at room temperature, etc.





FIGURE 12. The cake pictured here was iced with whipped cream icing stabilized with unflavored gelatin was used to ice this specialty cake. The gelatin gives the icing a mousse-like texture that is perfect for layer cakes, cake rolls, and specialty desserts. This icing is best tinted to pastel shades only. Store whipped cream icings under refrigeration.

- Prepare any decorations: flowers, piped chocolate decorations, sanding sugars, wash fresh fruit, etc.
- Prepare the workstation by cleaning the area and gathering tools (measuring equipment, spatulas, or stand mixer) as required.
- Preheat the broiler if making broiled topping.
- Prepare icing or glaze and ready it to be added to a baked product.
- Ice and/or glaze the cake. Store leftover icing or glaze under refrigeration (or as directed).
- Assemble the decorations and the tools (e.g., piping bags, tips, premade flowers, icing sugars, fresh fruits, etc.
- Decorate the cake and store as directed.

### DAIRY:

- Use butter instead of margarine or shortening for richer flavor. Butter should be at room temperature before mixing.
- Chilled heavy cream whipped in a chilled bowl will reach the best possible volume.

### EGGS:

- Raw eggs are potential hazards to food safety. Cook, heat, or use pasteurized egg products for all frosting that contains whole eggs, egg whites, or egg yolks.
- Egg whites must be at room temperature to whip well. Avoid any grease on utensils or mixing bowls.

### STORAGE:

- Refrigerate any cake with perishable icing.
- Refrigerate any unused icing. Use an airtight covered container and place plastic wrap on top of simple buttercream icing to prevent the top from drying out. Bring the frosting back to room temperature and beat buttercream frosting before using again. Icings may be refrigerated and used within two weeks.

### DECORATING:

- Calculate the amount of icing needed to fill between layers, on the sides, and for the top of different cakes.
- A possible, prepare frosting and frost cake on cool, dry days or prepare in an air-conditioned environment. The primary ingredient in icing is sugar and humidity affects the icing results.
- To prevent introducing crumbs onto the cake, dip the spatula in warm water and dry it off before reusing. A warm spatula will also give a smoother finish to a cake.

- To obtain a smooth top when icing, avoid lifting the spatula from the cake surface. Making a continuous flat movement from the outside edge to the center will help ensure a smooth cake top. Continue the flat movement as needed.
- Keep decorating tips in the best condition by washing after each use in hot, soapy water. Use a tip brush to clean icing clogged in openings. Rinse in hot water and air dry.

### Icing a Two-Layer Cake

STEP 1: Prepare and completely cool the cake layers.

STEP 2: **Crumb the cake** by brushing loose crumbs from the cake layers with a pastry brush.

STEP 3: Prepare the icing. Icing spreads best at room temperature.

STEP 4: Prepare the turntable. Bakeries place a small dollop of icing on the cake turntable, top the icing dollop with a sheet of parchment paper or cake board, and then place another dollop of icing on top of the parchment or cake board to stabilize the cake layer. [NOTE: The

dollops of icing help ensure that the cake and cardboard or parchment paper stay in place during icing and decorating.]

STEP 5: Place one cake layer upside down onto the prepared turntable.

STEP 6: Ice the cake. Ice the flat side of the bottom layer with about ½ cup of the icing. Using an offset spatula spread the icing from the center of the layer out and slightly over the edge of the bottom layer. Pushing the icing over the edge of the layer helps ensure that no gap (lack of icing) occurs between the two layers.



FIGURE 13. Select the "best looking" layer to become the cake top; then place the "other layer" flat side up on the turntable assembly. The second layer is placed atop the icing with the two "flat sides together." Ensuring that the flat sides are together has the effect of making the sides and top appear flat. Notice how straight the sides and top of this 3-layer cake appear. What do you think the baker did to ensure that the second and third layers also "appear flat?" There are multiple correct answers to this question.

STEP 7: Add the second layer, flat sides together. If necessary, remove any excess cake from the top layer that may prevent the cake from appearing even. [NOTE: Should trimming of the top layer's "bump" be necessary, carefully 'crumb the cake' again and apply a thin layer of icing to secure any crumbs to the cake before icing the remainder of the cake. Allow the thin icing layer to dry for a few minutes.] [TIP: Butter cakes bake more evenly (level) if the batter in the layer pan is slightly "dipped" in the center just before baking.]



STEP 8: Crumb-coat the cake. **Crumb coating** is spreading a thin layer of icing on the sides and top of the cake to seal any loose bits of cake. Let the crumb coat dry.

STEP 9: Decorate the cake. Using an offset spatula or pastry bag spread the decorative layer of icing on the cake sides. Then, ice the top of the cake. To create straight-line edges between the sides and the



FIGURE 14. Allowing the crumb coat to dry briefly is highly recommended. Sources suggest 10 to 20 minute wait times and some suggest 30-minute refrigeration prior to applying the decorative icing to the cake.

top, gently pull the spatula through the "lip of icing" that typically forms at the junction of the side and the top toward the center of the cake. Continue this process while making quarter turns and gently pulling the icing toward the center until the cake top and sides are straight. Cake sides may be textured with a cake or icing comb or with finely chopped nuts or coconut. To use the icing comb, hold the comb at a 45° angle to the sides and slowly rotate the turntable. The sides may also be smoothed or textured with an offset spatula.

STEP 10: Remove the cake from the turntable. The parchment sheet allows easy removal of the cake to a cake stand or display plate. TIP 1: Remove the parchment paper before adding the cake borders. TIP 2: If a cake stand will be used to display the cake, complete the borders *after* placing the cake on the stand. This action prevents repairing borders.

### **Practice Your Cake Decoration Skills**

STEP 1: Prepare a suitable buttercream icing for the cake or pastry.

STEP 2: Adjust the icing consistency based on the decorating design. A stiff consistency (e.g., the addition of more powdered sugar) is required to produce flower petals that maintain their shape. A medium consistency (typically the original recipe ratios) is used for stars, shells, and borders. A thin consistency (e.g., the addition of more water, milk, or corn syrup) is used for writing, vines, and leaves.

STEP 3 OPTIONAL: Create a paper pastry bag/cone.

STEP 4: Fill the pastry bag. Place a coupler inside the pastry bag to attach small decorating tips or place a large decorating tip inside the bag positioned to deposit icing. [NOTE: If using disposable pastry bags, cut off the tip to the desired opening for small or large decorating tip.] Add desired decorating tip and close with coupler ring. Grasp the middle of the piping bag and,



with one hand, fold the large end of the bag down toward the tip. This allows filling the bag  $\frac{2}{3}$  to  $\frac{3}{4}$  full without a mess. Bring the folded down portion of the pastry bag back to its original position and push the filling toward the tip with your hands. Next, burp out any air and twist the large opening shut. Hold the bag near the top twisted area with the dominant hand. Place filled pastry bag over a bowl. With a little pressure, remove any air in the pastry bag by twisting

the top until an air burp (and sometimes icing) comes out the tip.

STEP 5: Practice pastry bag position. Stars and flat petals are piped at a 90° angle, and writing and boarders are piped at a 45° angle. Bakers who are right handed generally work from right to left. Bakers who are left handed generally work left to right, except when writing with icing. Often directions will use "clock face" directions, for example: "Hold the bag at the 3 o'clock position."

STEP 6: Practice pressure and control of borders using a plate, cardboard round, or cake round pan. Hover just over the top of the decorated area: never touch the cake or practice area with the decorating tip.

STEP 7: Identify decorating techniques for each tip.

### Summary:

Icings and glazes are made with large amounts of sugar: some use granulated and some use powdered. Sugar is the most commonly used ingredient in icings



FIGURE 15. This baker is left-handed and cake decorating can be difficult for lefties, especially writing when you can't "see" the writing. It's not as simple as just "doing it the opposite way" if you're left handed. In fact some left-handed bakers learn to pipe and write with their right hand. Several left-handed decorating tips—stars, leaf, and flower—are available. Find more general layer cake decorating techniques with hints for lefties on the CraftyBaking website at https://www.craftybaking.com/howto/cakes-frost-cake-layers-using-piping-bag.



FIGURE 16. Which decorating tip was used to create each of the shapes pictured here? Compare your responses and see more pictures of designs that can be done with plain round, leaf, petal, and star tips on the Kitchn website at <a href="http://www.thekitchn.com/how-to-use-a-piping-bag-224064">http://www.thekitchn.com/how-to-use-a-piping-bag-224064</a>.



and glazes. The second most commonly used is liquid. Apart from those two ingredients: some recipes use whipped egg whites or egg yolks and some coatings are cooked, some are heated, and some are creamed and/or whipped.

Desserts are iced to add flavor and richness, develop the dessert's appearance and suggest special occasions, and improve the keeping quality with a protective coating. A layer cake is the most popular iced cake and requires a step-by-step sequential process to ensure a perfectly decorated cake. As you prepare icings and glazes for your baked goods, you are using both art and science: experiment!

### **Checking Your Knowledge:**

- 1. What is a coating? List the nine main types of icing and glaze coatings.
- 2. Differentiate between simple, French, Italian, and Swiss buttercream icing.
- 3. List and describe the main functions of the seven basic ingredients in icings and glazes.
- 4. List the steps to ice a two-layer cake including the turntable set-up.
- 5. Describe a crumb coat and its purpose in cake decorating.

### **Expanding Your Knowledge:**



Petit fours or glacé (glazed) is the French term for tiny cakes that originated in the court of Marie Antoinette. Petit fours are usually bite-size cakes that often use several coatings—two or more icings and one or two glazes. Fondant-covered petit fours require to first be iced with a buttercream in order for the fondant to properly adhere (stick). Although petit fours are typically bite-size (about 1-inch cubes or rounds), they are as large as a 2-inch cubes or rounds. Petit fours are also cut into small shapes such as hearts, flowers, triangles, etc.

Some petit fours are a single layer of cake covered with a rolled fondant, fruit glaze (that has dried), or buttercream icing to give a smooth surface for the poured fondant to stick to. Others are layered cakes with fillings: icings, glazes, fruit purée, etc. See the Web Links for picture examples and details about suitable cake mixtures, cutting techniques, and the use of the freezer in creating perfect petit fours.

### Web Links:

**Cakes Decorated at High-Speed—Video** https://www.youtube.com/watch?v=O2gvkk3C-i4

**Decorating Essentials and Left-Handed Decorating Tips** http://www.cakeandcandy.com/decorating\_essentials.htm



### Fondant Ghost Cupcakes

https://www.chsugar.com/recipe/fondant-ghost-cupcakes

### Glaze—Baked Goods

http://www.craftybaking.com/howto/glaze-baked-goods

How to Make Marshmallow Fondant and Rainbow Rose Flowers https://www.youtube.com/watch?v=sbt7ymzHSP8

#### Petit Fours Mini Cake Recipe

http://www.wilton.com/petit-fours-mini-cakes/WLRECIP-292.html#q= petit+fours&start=1

### **Pretty Petit Fours Mini Cakes**

http://www.wilton.com/pretty-petit-fours-mini-cakes/WLPROJ-702.html#q= petit+fours&prefn1=contentType&prefv1=decorating&start=25

#### Wedding Cake Decorated in 5 Minutes—Video

https://www.youtube.com/watch?v=2Rxfr-An7m8

