

Third Edition

Textbook of Baking & Pastry Fundamentals

Sarah R. Labensky, Priscilla A. Martel,

Eddy Van Damme

PEARSON NEW INTERNATIONAL EDITION



Pearson New International Edition

Third Edition
Textbook of Baking & Pastry Fundamentals
Sarah R. Labensky, Pricilla A. Martel,
Eddy Van Damme

PEARSON

Pearson Education Limited

Edinburgh Gate

Harlow

Essex CM20 2JE

England and Associated Companies throughout the world

Visit us on the World Wide Web at: www.pearsoned.co.uk

© Pearson Education Limited 2014

All rights reserved. No part of this publication may be reproduced, stored in a retrieval system, or transmitted in any form or by any means, electronic, mechanical, photocopying, recording or otherwise, without either the prior written permission of the publisher or a licence permitting restricted copying in the United Kingdom issued by the Copyright Licensing Agency Ltd, Saffron House, 6–10 Kirby Street, London EC1N 8TS.

All trademarks used herein are the property of their respective owners. The use of any trademark in this text does not vest in the author or publisher any trademark ownership rights in such trademarks, nor does the use of such trademarks imply any affiliation with or endorsement of this book by such owners.

PEARSON

ISBN 10: 1-292-02008-3

ISBN 13: 978-1-292-02008-2

British Library Cataloguing-in-Publication Data

A catalogue record for this book is available from the British Library

Printed in the United States of America

Table of Contents

1. Glossary Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	1
2. Professionalism Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	13
3. Tools and Equipment for the Bakeshop Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	35
4. Principles of Baking Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	61
5. Bakeshop Ingredients Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	79
6. Mise En Place Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	137
7. Quick Breads Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	157
8. Enriched Yeast Breads Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	193
9. Artisan and Yeast Breads Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	235
10. Laminated Doughs Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	305
11. Cookies and Brownies Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	347
12. Pastry and Dessert Components Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	405
13. Pies and Tarts Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	433

14. Cakes and Icings	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	479
15. Custards, Creams and Sauces	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	539
16. Ice Cream and Frozen Desserts	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	597
17. Tortes and Specialty Cakes	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	623
18. Healthful and Special Needs Baking	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	657
19. Petits Fours and Confections	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	695
20. Restaurant and Plated Desserts	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	721
21. Chocolate and Sugar Work	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	753
22. Appendix: Measurement and Conversion Charts	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	819
23. Appendix: Fresh Fruit Availability Chart	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	823
24. Appendix: Templates	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	825
25. Bibliography	
Sarah R. Labensky/Priscilla R. Martel/Eddy Van Damme	831
Index	835

GLOSSARY

absorption—the ability of flour to absorb moisture when mixed into a dough; varies according to protein content and growing and storage conditions of the flour

acid—foods such as citrus juice, vinegar and wine that have a sour or sharp flavor (most foods are slightly acidic); acids have a pH of less than 7

acidulation—the browning of cut fruit caused by the reaction of an enzyme (polyphenoloxidase) with the phenolic compounds present in these fruits; this browning is often mistakenly attributed to exposure to oxygen

additives—substances added to many foods to prevent spoilage or to improve appearance, texture, flavor or nutritional value; may be synthetic materials copied from nature (for example, sugar substitutes) or naturally occurring substances (for example, lecithin); some food additives may cause allergic reactions in sensitive people

aerate—(1) to whip air into a mixture to lighten it, such as beating egg whites to a foam; (2) to incorporate air into a mixture through sifting and mixing

agave—a type of succulent plant native to the Southwest and the Americas; a syrup made from its thick pointed leaves is used as a natural sweetener

aging—the period during which freshly milled flour is allowed to rest so that it will whiten and produce less sticky doughs; the aging of flour can be chemically accelerated

allergens—substances that may cause allergic reactions in some people

amaranth—tiny oval seeds of a type of annual herb plant native to South America; used as a cooked grain and flour

aroma—the sensations, as interpreted by the brain, of what we detect when a substance comes in contact with sense receptors in the nose

artisan—a person who works in a skilled craft or trade; one who works with his or her hands;

applied to bread bakers and confectioners who prepare foods using traditional methods

baba—a small, light yeast cake soaked in rum syrup; traditionally baked in an individual cylindrical mold, giving the finished product a mushroom shape

bacteria—single-celled microorganisms, some of which can cause diseases, including food-borne diseases

bain marie—(ban mah-ree) (1) a hot-water bath used to gently cook food or keep cooked food hot; (2) a metal container for holding food in a hot-water bath

bake blind—to bake a pie shell or tart shell unfilled using baking weights or beans to support the crust as it bakes

bake-off—the procedure of cooking a prepared dough or other pastry item that has been produced elsewhere and is merely finished on site

baker's peel—a flat-handled paddle used to slide food, particularly bread and pizza, into a deck oven

baker's percentage—a system for measuring ingredients in a formula by expressing them as a percentage of the total flour weight

baking—a dry-heat cooking method in which foods are surrounded by hot, dry air in a closed environment; similar to roasting, the term *baking* is usually applied to breads, pastries, vegetables and fish

baking powder—a mixture of sodium bicarbonate and one or more acids, generally cream of tartar and/or sodium aluminum sulfate, used to leaven baked goods; it releases carbon dioxide gas if moisture is present in a formula; single-acting baking powder releases carbon dioxide gas in the presence of moisture only; double-acting baking powder releases some carbon dioxide gas upon contact with moisture, and then more gas is released when heat is applied

baking soda—sodium bicarbonate, an alkaline compound that releases carbon dioxide gas when combined with an acid and moisture; used to leaven baked goods

baking weights—small ceramic or metal disks used to keep pie crust from bubbling up during baking; used when baking an unfilled pie or tart shell; also known as *pie weights*

banneton—(BAN-eh-tohn) a traditional woven basket, often lined with canvas, in which yeast bread is placed to rise before baking

barquette—a small boat-shaped pastry shell used for miniature cakes or tarts served as canapés or petits fours

base—a substance that neutralizes an acid in a liquid solution; ingredients such as sodium bicarbonate (baking soda) that have an alkaline or bitter flavor; bases have a pH higher than 7

batter—(1) a semiliquid mixture containing flour or other starch used to make cakes and breads; the gluten development is minimized and the liquid forms the continuous medium in which other ingredients are dispersed; generally contains more fat, sugar and liquids than a dough; (2) a semiliquid mixture of liquid and starch used to coat foods for deep-frying

Baumé scale—(boh-may) *see hydrometer*

Bavarian cream—a sweet dessert mixture made by thickening custard sauce with gelatin and then folding in whipped cream; the final product is poured into a mold and chilled until firm

bean flour—cooked beans, including chickpeas, soybeans and white beans, that are dried, then ground into a fine powder; used in place of gluten-forming wheat flours

beating—a mixing method in which foods are vigorously agitated to incorporate air or develop gluten; a spoon or electric mixer fitted with a paddle is used

beignets—squares or strips of éclair paste that are deep-fried and dusted with powdered sugar; squares or strips of éclair paste or yeast dough similar to doughnuts

bench rest—allowing bread dough, usually covered, to ferment in bulk on a worktable

biga—Italian term for a dry yeast dough starter that requires a long fermentation

biscuit—(1) a small, flaky quick bread leavened with baking soda or baking powder for a light, tender texture; the dough is rolled out and cut into circles or dropped from a spoon; (2) any dry, flat cake, usually leavened with baking powder and/or baking soda; (3) (bee-SQUEE) a type of dry sponge cake used to make multilayered tortes

biscuit method—a mixing method used to make biscuits, scones and flaky doughs; it involves cutting cold fat into the flour and other dry ingredients before any liquid is added

blanching—very briefly and partially cooking a food in boiling water or hot fat; used to assist preparation (for example, to loosen peels from fruits or vegetables), as part of a combination cooking method, to remove undesirable flavors or to prepare a food for freezing

blending—a mixing method in which two or more ingredients are combined just until they are evenly distributed

bloom—(1) a white, powdery layer that sometimes appears on chocolate; (2) to soften granulated gelatin in a liquid before melting and using

boiling—a moist-heat cooking method that uses convection to transfer heat from a hot (approximately 212°F/100°C) liquid to the food submerged in it

bombe—(bahm) two or more flavors of ice cream, or ice cream and sherbet, shaped in a spherical mold; each flavor is a separate layer that forms the shell for the next flavor

bombe mixture—(Fr. *pâte à bombe*) egg yolks cooked with sugar syrup and whipped, used as a base for still-frozen desserts and cakes

bouchées—(boo-SHAY) small puff pastry shells that can be filled and served as bite-size hors d'oeuvre or petits fours

boulangier (boo-lawn-JHAY) French for “baker”

bran—the tough outer layer of a cereal grain and the part highest in fiber

bread flour—blended flour made from hard winter wheat with a protein content between 12 and 15 percent

brioche—(bree-OHSH) a rich yeast bread containing large amounts of eggs and butter

broiling—a dry-heat cooking method in which foods are cooked by heat radiating from an overhead source

brotforn—(BROT-form) a traditional basket made from coiled willow in which yeast bread is placed to rise before baking; the basket leaves circular marks in the dough; heavy plastic versions are available for commercial food service use

buckwheat flour—dark, nutty-tasting flour milled from the seeds of the buckwheat plant and used to make bread, cereals and baked goods

bulk fermentation—the rise given to the entire mass of yeast dough before the dough is shaped

bun—any of a variety of small, round yeast rolls; may be sweet or savory

buttercream—a light, smooth, fluffy frosting of sugar, fat and flavorings; egg yolks or whipped egg whites are sometimes added; the three principal kinds are simple, Italian and French

cake—in American usage, refers to a broad range of pastries, including layer cakes, coffeecakes and gâteaux; can refer to almost anything that is baked, tender, sweet and sometimes frosted

cake comb—a utensil made from hard plastic, metal or rubber with sharp teeth cut into one or more of its sides; used to create patterns in icings and chocolate

cake flour—a finely milled soft wheat flour with a protein content of less than 8 percent; used to produce tender products

calorie—a unit of energy measured by the amount of heat required to raise 1000 grams of water 1 degree Celsius; it is also written as *kilocalorie* or *kcal* and is used as a measure of food energy

candy rulers—steel or aluminum bars of varying lengths and thicknesses used to contain fillings for candies; the metal bars may also be used as guidelines for rolling pastry dough to a uniform thickness

cannoli—an Italian pastry made from a dough shell curled into a tube, deep-fried and filled with sweetened ricotta cheese

caramelization—the process of cooking sugars; the browning of sugar enhances the flavor and appearance of foods

carbohydrates—a group of compounds composed of oxygen, hydrogen and carbon, the human body's primary source of energy

(4 calories per gram); carbohydrates are classified as simple (including certain sugars) and complex (including starches and fiber)

carryover cooking/baking—the cooking that occurs after a food is removed from a heat source; it is accomplished by the residual heat remaining in the food

charlotte—a dessert made in a mold lined with ladyfingers and filled with a custard cream stabilized with gelatin

cheesecloth—a light, fine mesh gauze used to strain liquids and make sachets

china cap—a cone-shaped strainer made of perforated metal

cholesterol—a fatty substance found in foods derived from animal products and in the human body; in excess, it has been linked to heart disease

chop—to cut an item into small pieces where uniformity of size and shape is neither feasible nor necessary

choux pastry—(shoo) *see* éclair paste

churros—a Mexican and Spanish pastry in which sticks of éclair paste flavored with cinnamon are deep-fried and rolled in sugar while still hot

citric acid—an acid found in citrus fruit juice, used to enhance flavor in foods and to prevent crystallization of sugar syrups; available in liquid or powdered form

citrus—fruits characterized by a thick rind, most of which is a bitter white pith (albedo) with a thin exterior layer of colored skin (zest); their flesh is segmented and juicy and varies from bitter to tart to sweet

clarified butter—purified butterfat; the butter is melted and the water and milk solids are removed

club roll—a small oval-shaped roll made of crusty French bread

coagulation—the irreversible transformation of proteins from a liquid or semiliquid state to a drier, solid state; usually accomplished through the application of heat

cocoa butter—the fat found in cocoa beans and used in fine chocolates

coconut cream—(1) a coconut-flavored liquid made like coconut milk but with less water; it is creamier and thicker than coconut

milk; (2) the thick fatty portion that separates and rises to the top of canned or frozen coconut milk. Do not substitute cream of coconut for true coconut cream.

coconut milk—a coconut-flavored liquid made by pouring boiling water over shredded coconut; may be sweetened or unsweetened. Do not substitute cream of coconut for coconut milk.

coconut water—the thin, slightly opaque liquid contained within a fresh coconut

composition—a completed plate's structure of colors, shapes and arrangements

compound butter—(Fr. *beurre composé*) fresh butter blended with spices, herbs and seasonings; used to flavor sauces or as flavorful spreads; these blends may be savory or sweet

concentrate—also known as a *fruit paste* or *compound*; a reduced fruit purée, without a gel structure, used as a flavoring

conching—stirring melted chocolate with large stone or metal rollers to create a smooth texture in the finished chocolate

conditioning—soaking dried fruit in liquid before use so that the fruit remains tender after baking

conduction—the transfer of heat from one item to another through direct contact

confectionery—transforming sugar into sweets; also refers to the trade of candy making

convection—the transfer of heat caused by the natural movement of molecules in a fluid (whether air, water or fat) from a warmer area to a cooler one; mechanical convection is the movement of molecules caused by stirring

conversion factor—(C.F.) the number used to increase or decrease ingredient quantities to change the yield of a formula

cookery—the art, practice or work of cooking

cookie press—also known as a *cookie gun*; a hollow tube fitted with a plunger and an interchangeable decorative tip or plate; soft cookie dough is pressed through the tip to create shapes or patterns

cookies—small, sweet, flat pastries; usually classified by preparation or make-up techniques as drop, icebox, bar, cutout, pressed and wafer

cooking—(1) the transfer of energy from a heat source to a food; this energy alters the food's molecular structure, changing its texture, flavor, aroma and appearance; (2) the preparation of food for consumption

cooking medium—the air, fat, water or steam in which a food is cooked

coring—the process of removing the seeds or pit from a fruit or fruit-vegetable

coupe—(koop) an ice cream sundae, especially one served with a fruit topping

cream filling—a pie filling made of flavored pastry cream thickened with cornstarch

cream of coconut—a canned commercial product consisting of thick, sweetened coconut-flavored liquid; used for baking and in beverages

creaming—a mixing method in which softened fat and sugar are vigorously combined to incorporate air

creams—also known as *crèmes*; include light, fluffy or creamy-textured dessert foods made with whipped cream or whipped egg whites, such as Bavarian creams, chiffons, mousses and crème Chantilly

crème anglaise—(khrem ahn-GLEHZ) also known as *crème à l'anglaise*; see **vanilla custard sauce**

crème brûlée—(krehm broo-LAY) French for "burnt cream"; used to describe a rich dessert custard topped with a crust of caramelized sugar

crème caramel—(khrem kair-ah-MEHL) like *crème renversée* (rehn-vehr-SAY) and flan, a custard baked over a layer of caramelized sugar and inverted for service

crème Chantilly—(khrem shan-TEE) heavy cream whipped to soft peaks and flavored with sugar and vanilla; used to garnish pastries or desserts or folded into cooled custard or pastry cream for fillings

crème Chiboust—(khrem chee-BOOS) a vanilla pastry cream lightened by folding in Italian meringue; traditionally used in gâteau St. Honoré

crème pâtissière—(khrem pah-tees-SYEHR) see **pastry cream**

crêpe—(krap) a thin, delicate unleavened griddlecake made with a very thin egg batter

cooked in a very hot sauté pan; used in sweet and savory preparations

crêpes flambées—(krap flahm-BAY) a dessert preparation consisting of thin pancakes filled with fruit, jam or other fillings served flaming; produced by igniting brandy, rum or other liquor so that the alcohol burns off and the flavor of the liquor is retained

croissant—(krwah-SAHN) a crescent-shaped roll made from a rich, laminated yeast dough

croquembouche—(krow-kem-BOOSH) a pyramid of small choux puffs, each filled with pastry cream; a French tradition for Christmas and weddings, it is held together with caramelized sugar and decorated with spun sugar or marzipan flowers

croûte, en—(awn KROOT) describes a food encased in a bread or pastry crust

cruller—a Dutch pastry in which a loop or strip of twisted éclair paste is deep-fried

crumb—the interior of bread or cake; may be elastic, aerated, fine or coarse grained

crumb coat—a thin layer of icing applied to a cake to seal loose surface crumbs before a final decorative layer of icing is applied

cuisine—the ingredients, seasonings, cooking procedures and styles attributable to a particular group of people; the group can be defined by geography, history, ethnicity, politics, culture or religion

curd—(1) the solid portion of milk when it separates, which becomes cheese; (2) a stirred custard made from eggs, sugar, butter and fruit juice, usually citrus

curdling—the separation of milk or egg mixtures into solid and liquid components; caused by overcooking, high heat or the presence of acids

custard—any liquid thickened by the coagulation of egg proteins; its consistency depends on the ratio of eggs to liquid and the type of liquid used; custards can be baked in the oven or cooked in a bain marie or on the stove top

cutting—(1) reducing a food to smaller pieces; (2) a mixing method in which solid fat is incorporated into dry ingredients until only lumps of the desired size remain

deck oven—an oven with stationary, individually heated shelves; products can be

baked on each deck's floor (hearth) either in or out of pans

deep-frying—a dry-heat cooking method that uses convection to transfer heat to a food submerged in hot fat; foods to be deep-fried are usually first coated in batter or breading

density—the relationship between the mass and volume of a substance ($D = m/v$); as more and more solids are dissolved in a liquid, the liquid becomes heavier or denser; sugar density is measured on the Baumé scale using a saccharometer

détrempe—(day-trup-eh) a paste made with flour and water during the first stage of preparing pastry doughs, especially rolled-in doughs

develop—to mix dough to the point when the protein bond in the flour forms gluten and the dough becomes smooth and elastic

dipping fork—a utensil used to hold chocolate or small pastries for dipping into chocolate or other coating; consists of a narrow handle with two, three or four long, thin prongs, which are easily inserted into small foods

docker—a hand tool designed to pierce holes in the surface of bread, cracker, pastry and pizza dough before baking to release air bubbles so the product bakes evenly

docking—pricking small holes in an unbaked dough or crust to allow steam to escape and to prevent the dough from rising when baked

dough—a mixture of flour and other ingredients used in baking; has a low moisture content, with gluten forming the continuous medium into which other ingredients are embedded; it is often stiff enough to cut into shapes

dough conditioner—enzymes, emulsifiers and yeast foods added to bread dough to improve gluten development or to soften the dough for faster mixing and shorter fermentation times; available as a powdered blend

dough hook—a mixer attachment used when kneading bread dough or other heavy mixtures

dry-heat cooking methods—cooking methods, principally broiling, grilling, roasting and baking, sautéing, pan-frying and deep-frying, that use air or fat to transfer heat through conduction and convection; dry-heat

cooking methods allow surface sugars to caramelize

drying agent—products such as silica gel used to remove humidity from the air for storing sugar work, nougatine and dry cookies, which would soften under moist conditions

dulce de leche—(DUL-say de LAY-chay) a thick, caramel-like syrup made by slowly heating sweetened milk; used as a sauce or spread, especially in Latin American, Spanish and South American cooking

dumpling—any of a variety of small starchy products made from doughs or batters that are simmered or steamed; can be plain or filled

durum wheat—a species of very hard wheat with a particularly high amount of protein; it is used to make couscous or milled into semolina, which is used for making pasta

dusting—lightly coating the surface of an unbaked dough product with a powdery substance such as flour or cornmeal, usually to prevent sticking or to give the product a decorative finish

éclair—(ay-clayrz) baked fingers of éclair paste filled with pastry cream; the top is then coated with chocolate glaze or fondant

éclair paste—also known as *pâte à choux* or *choux pastry*; a soft dough that produces hollow baked products with crisp exteriors; used for making éclairs, cream puffs and savory products

edible food lacquer—a composition of fats, lecithin and other edible ingredients used to create a shine on marzipan and other confections

egg wash—a mixture of beaten eggs (whole eggs, yolks or whites) and a liquid, usually milk or water, used to coat doughs before baking to add sheen

emulsification—the process by which generally unmixable liquids, such as oil and water, are forced into a uniform distribution

emulsifier—a substance, natural or chemical, added to a mixture to assist in the binding of unmixable liquids; lecithin found in egg yolks or mono- and diglycerides are commonly used emulsifiers

emulsify—the process of combining a fat and a liquid into a homogeneous mixture, accomplished by proper blending of ingredients

emulsion—(1) a uniform mixture of two unmixable liquids; (2) flavoring oils such as orange and lemon, mixed into water with the aid of emulsifiers

endosperm—the largest part of a cereal grain and a source of protein and carbohydrates (starch); the part used primarily in milled products

entremet—(AHN-truh-may) (1) a contemporary dessert torte made with layers of spongecake, mousse and other fillings; (2) in traditional menu usage the term refers to desserts

essential oils—pure oils extracted from the skins, peels and other parts of plants; used to give their aroma and taste to flavoring agents in foods, cosmetics and other products

evaporation—the process by which heated water molecules move faster and faster until the water turns to a gas (steam) and vaporizes; evaporation is responsible for the drying of foods during cooking

extracts—concentrated mixtures of ethyl alcohol and flavoring oils such as vanilla, almond and lemon

fats—(1) a group of compounds composed of oxygen, hydrogen and carbon atoms that supply the body with energy (9 calories per gram); fats are classified as saturated, monounsaturated or polyunsaturated; (2) the general term for butter, lard, shortening, oil and margarine used as cooking media or ingredients

fermentation—the process by which yeast converts sugar into alcohol and carbon dioxide; it also refers to the time that yeast dough is left to rise, that is, the time it takes for carbon dioxide gas cells to form and become trapped in the gluten network

feuilletage—(fuh-yuh-TAHZH) French for “flaky”; used to describe puff pastry or the process for making puff pastry

feuillettées—(fuh-yuh-TAY) square, rectangular or diamond-shaped puff pastry boxes; may be filled with a sweet or savory mixture

fiber—also known as *dietary fiber*, the indigestible carbohydrates found in grains, fruits and vegetables; fiber aids digestion

flambé—(flahm-BAY) to ignite brandy, rum or other liquor so that the alcohol burns off and the flavor of the liquor is retained

flan—a firm custard baked over a layer of caramelized sugar and inverted for service

flat icing—an opaque white sugar glaze used to decorate Danish pastry and coffeecakes

flavor—an identifiable or distinctive quality of a food, drink or other substance perceived with the combined senses of taste, touch and smell

flavoring—an item that adds a new taste to a food and alters its natural flavors; flavorings include herbs, spices, vinegars and condiments; the terms *seasoning* and *flavoring* are often used interchangeably

flax—a grain plant also known as *linseed*, rich in omega-3 fatty acids; flax hulls and seeds are crushed into a meal or flour to release beneficial compounds

flour—a powdery substance of varying degrees of fineness made by milling grains such as wheat, corn or rye

fluidity—a physical characteristic of chocolate, its ability to flow when melted; it is determined by the percentage of cocoa butter or fat in the chocolate

foam icing—a coating for cakes made from meringue cooked with a hot sugar syrup; also known as *Italian meringue*

folding—a mixing method in which light, airy ingredients are incorporated into heavier ingredients by gently moving them from the bottom of the bowl up over the top in a circular motion, usually with a rubber spatula

fondant—(FAHN-dant) a sweet, thick opaque sugar paste commonly used for glazing pastries such as napoleons or making candies

food allergy—a reaction by the immune system to foods; symptoms include digestive problems, hives, swollen airways or the life-threatening reaction known as *anaphylaxis*

food intolerance—an abnormal physical response to food that is not immune-mediated

formula—a recipe; the term is most often used in the bakeshop

frangipane—(fran-juh-pahn) a sweet almond and egg filling cooked inside pastry

French buttercream—a cake icing or filling made with egg yolks into which a hot sugar syrup is beaten before butter and flavorings are added; also known as *mousseline buttercream*

friable—easily crumbled; said of a baked good with a low moisture and high fat content such as a butter cookie

friandise—(free-ohn-DEEZE) a small pastry or sweet delicacy often served between or after meals; a petit four

friction factor—the temperature increase a mixer generates in bread dough as it is being kneaded

fritters—deep-fried sweet or savory cakes often made from chopped fruits or vegetables coated in batter

frosting—also known as *icing*; a sweet decorative coating used as a filling between the layers or as a coating over the top and sides of a cake

fruit—the edible organ that develops from the ovary of a flowering plant and contains one or more seeds (pips or pits)

frying—a dry-heat cooking method in which foods are cooked in hot fat; includes sautéing, stir-frying, pan-frying and deep-frying

fudge—a cooked mixture of sugar, corn syrup, butter or cream and flavorings made into a soft candy or thick icing

ganache—(ga-nosh) a rich blend of chocolate and heavy cream and, optionally, flavorings, used as a pastry or candy filling or frosting

garnish—(1) food used as an attractive decoration; (2) a subsidiary food used to add flavor or character to the main ingredient in a dish

gâteau—(gah-toe) (1) in American usage, refers to any cake-type dessert; (2) in French usage, refers to various pastry items made with puff pastry, éclair paste, short dough or sweet dough

gelatin—a natural product derived from collagen, an animal protein, used to thicken liquids when chilled; available in two forms: granulated gelatin and sheet (also called *leaf*) gelatin

gelatinization—the process by which starch granules are cooked; they absorb moisture when placed in a liquid and heated; as the moisture is absorbed, the product swells, softens and clarifies slightly

gelato—(jah-laht-to) an Italian-style ice cream that is denser than American-style ice cream

genoise—(zhen-waahz) (1) a form of whipped-egg cake that uses whole eggs whipped with sugar; (2) a French spongecake

germ—the smallest portion of a cereal grain and the only part that contains fat

glacage—(glah-sahge) browning or glazing a food, usually under a salamander or broiler

glaze—(1) any shiny coating applied to food or created by browning; (2) a thin, flavored coating poured or dripped onto a cake or pastry

glucose—(1) an important energy source for the body; also known as *blood sugar*; (2) a thick, sweet syrup made from cornstarch, composed primarily of dextrose; light corn syrup can usually be substituted for it in baked goods or candy making; also sold in a powdered form

gluten—an elastic network of proteins created when wheat flour is moistened and manipulated; it gives structure and strength to baked goods and is responsible for their volume, texture and appearance; the proteins necessary for gluten formation are glutenin and gliadin

gold leaf—delicate sheets of gold used to decorate chocolate and iced cakes; the thin sheets, separated by tissue paper, are sold in packs available from cake decorating suppliers; edible silver leaf, known as *vark*, is also available

gougère—(goo-ZHAIR) éclair paste flavored with cheese or herbs, baked and served as a savory hors d'oeuvre

gourmet foods—foods of the highest quality, perfectly prepared and beautifully presented

grains—(1) grasses that bear edible seeds, including corn, rice and wheat; (2) the fruit (that is, the seed or kernel) of such grasses

grind—to pulverize or reduce food to small particles using a mechanical grinder or food processor

grinding—a milling process in which grains are reduced to a powder; the powder can be of differing degrees of fineness or coarseness

gum arabic—a water-soluble gum obtained from several species of the acacia tree

gum paste—a smooth dough of sugar and gelatin that can be colored and used to make decorations, especially for pastries

Hazard Analysis Critical Control Points (HACCP)—a rigorous system of self-inspection used to manage and maintain sanitary

conditions in all types of food service operations; it focuses on the flow of food through the food service facility to identify any point or step in preparation (known as a *critical control point*) where some action must be taken to prevent or minimize a risk or hazard

hearth—the heated bottom surface of a baking oven on which foods are directly baked

herb—any of a large group of aromatic plants whose leaves, stems or flowers are used as a flavoring; used either dried or fresh

high-ratio cake—a form of creamed-fat cake that uses emulsified shortening and has a two-stage mixing method

homogenization—the process by which milkfat is prevented from separating out of milk products

hotel pan—a rectangular, stainless steel pan with a lip allowing it to rest in a storage shelf or steam table; available in several standard sizes

hull—also known as the *husk*; the outer covering of a fruit, seed or grain

humectant—a substance such as corn syrup, glucose syrup or honey that absorbs moisture, making baked goods soft and tender

hybrid—the result of crossbreeding genetically different species; often a unique product

hydrogenated fat—unsaturated, liquid fats that are chemically altered to remain solid at room temperature, such as solid shortening or margarine

hydrogenation—the process used to harden oils; hydrogen atoms are added to unsaturated fat molecules, making them partially or completely saturated and thus solid at room temperature

hydrometer—a device used to measure specific gravity; it shows degrees of concentration on the Baumé scale; also known as a *saccharometer*

hygroscopic—describes a food that readily absorbs moisture from the air

infuse—to flavor a liquid by steeping it with ingredients such as tea, coffee, herbs or spices

instant-read thermometer—a thermometer used to measure the internal temperature of foods; the stem is inserted in the food, producing an instant temperature readout

interferent—a substance such as glucose syrup or lemon juice that helps stop sugar from recrystallizing when dissolved in a solution

IQF (individually quick-frozen)—describes the technique of rapidly freezing each individual item of food such as slices of fruit, berries or pieces of fish before packaging; IQF foods are not packaged with syrup or sauce

isomalt—a type of sugar alcohol used as a sugar substitute and in sugar work. It is a disaccharide, composed of glucose and mannitol that is made from sugar beets

Italian buttercream—a cake icing or filling made from meringue cooked with hot sugar syrup into which butter and flavorings are beaten

jam—a fruit gel made from fruit pulp and sugar

jelly—a fruit gel made from fruit juice and sugar

juice—the liquid extracted from any fruit or vegetable

Kaiser roll—a large round yeast roll with a crisp crust and a curved pattern stamped on the top; used primarily for sandwiches

kneading—a mixing method in which dough is worked to develop gluten

kuchen—(KOO-ken) a German-style cake, often yeasted

kugelhopf—(KOO-guhl-hopf) a light, buttery yeast cake studded with nuts and raisins and baked in a special fluted mold; a specialty of Germany, the Alsace region of France and other central European countries

lactose—a disaccharide that occurs naturally in mammalian milk; milk sugar

lamination—incorporating fat such as butter into a pastry dough, making a laminated dough with hundreds of crisp layers, as for puff pastry and croissants

leavener—an ingredient or process that produces or incorporates gases in a baked product in order to increase volume, provide structure and give texture

lecithin—a natural emulsifier found in egg yolks and soybeans

levain—the French term for “leavening”; it refers to a dough made from a sourdough

culture that forms the basis for French-style sourdough bread

liqueur—a strong, sweet, syrupy alcoholic beverage made by mixing or redistilling neutral spirits with fruits, flowers, herbs, spices or other flavorings; also known as a *cordial*

liquor—an alcoholic beverage made by distilling grains, vegetables or other foods; includes rum, whiskey and vodka

macerate—to soak foods in a flavorful liquid, usually alcoholic, to soften them

Maillard reaction—the process whereby sugar breaks down and darkens in the presence of protein and heat; nonenzymatic browning

make-up—the cutting, shaping and forming of dough products before baking

malting—soaking, sprouting and drying barley or other grains to develop enzymes; malted grains may be added to wheat flour to improve its baking qualities

mandoline—a stainless steel, hand-operated slicing device with adjustable blades

marmalade—a citrus jelly that contains unpeeled slices of citrus fruit

marquise—(mahr-KEE) a frozen mousseli-like dessert, usually chocolate

marzipan—(MAHR-sih-pan) a paste of ground almonds, sugar and glucose syrup used to fill and decorate pastries

master baker—a professional title given exclusively to highly skilled and experienced bakers who have demonstrated their professional knowledge in written and practical exams

meal—the coarsely ground seeds of any edible grain such as corn or oats

melting—the process by which certain foods, especially those high in fat, gradually soften and then liquefy when heated

menu—a list of foods and beverages available for purchase

meringue—(muh-reng) a foam made of beaten egg whites and sugar

metric system—a measurement system based on decimal units in which the gram, liter and meter are the basic units of weight, volume and length, respectively

microorganisms—single-celled organisms as well as tiny plants and animals that can be seen only through a microscope

microwave cooking—a heating method that uses radiation generated by a special oven to penetrate the food; it agitates water molecules, creating friction and heat; this energy then spreads throughout the food by conduction (and by convection in liquids)

millet—a high-protein cereal grain cooked and eaten like rice; ground and used in combination with wheat flour in baking

milling—the process by which grain is ground into flour or meal

mise en place—(meez on plahs) French for “putting in place”; refers to the preparation and assembly of all necessary ingredients and equipment before cooking begins

mix—(1) to combine ingredients in such a way that they are evenly dispersed throughout the mixture; (2) a blend of dry ingredients to which liquid, eggs and other ingredients are added in order to make a batter or dough

moist-heat cooking methods—cooking methods, principally simmering, poaching, boiling and steaming, that use water or steam to transfer heat through convection; moist-heat cooking methods are used to emphasize the natural flavors of foods

molder—a mechanical device that shapes divided bread dough into forms before proofing and baking

molding—the process of shaping foods, particularly custards, tortes and mousses, into attractive, hard-edged shapes by using metal rings, circular cutters or other forms

molds—(1) algaelike fungi that form long filaments or strands; for the most part, molds affect only food appearance and flavor; (2) containers used for shaping foods

molecular gastronomy—a culinary movement that investigates the use of chemistry, physics and scientific principles in restaurant cooking

mortar and pestle—a hard bowl (the mortar) in which foods such as spices are ground or pounded into a powder with a club-shaped tool (the pestle)

mousse—(moose) a soft, creamy food, either sweet or savory, lightened by adding whipped cream, beaten egg whites or both

mousseline—(moose-uh-leen) a cream, sauce or buttercream lightened by folding in whipped cream

mouth feel—the sensation, other than flavor, that a food or beverage has in the mouth; a function of the item’s body, texture and, to a lesser extent, temperature

muffin method—a mixing method used to make quick-bread batters; it involves combining liquid fat with other liquid ingredients before adding them to the dry ingredients

Napoleon—a many-layered pastry made from baked sheets of puff pastry filled with pastry cream or whipped cream

neapolitan—a three-layered loaf or cake of ice cream; each layer is a different flavor and a different color, a typical combination being chocolate, vanilla and strawberry

nectar—the diluted, sweetened juice of peaches, apricots, guavas, black currants or other fruits, the juice of which would be too thick or too tart to drink straight

noisette—French for “hazelnut”

no-time dough—yeast dough formulated with additional yeast and dough conditioners to accelerate fermentation to 15 to 30 minutes

nougat—a candy made from caramelized sugar, almonds and egg whites; known as *turrón* in Spain and *torrone* in Italy

nougat glacé—a frozen dessert composed of crumbled nougatine folded into Italian meringue and whipped cream

nougatine—a confection made from toasted nuts and caramelized sugar used as a decoration, as an ingredient or in showpieces

nut—(1) the edible single-seed kernel of a fruit surrounded by a hard shell; (2) generally, any seed or fruit with an edible kernel in a hard shell

nutrients—the chemical substances found in food that nourish the body by promoting growth, facilitating body functions and providing energy; the six categories of nutrients are proteins, carbohydrates, fats, water, minerals and vitamins

oil—a type of fat that remains liquid at room temperature

oven spring—the rapid rise of yeast goods when first placed in a hot oven; results from

the temporary increase in yeast activity and the expansion of trapped gases

overrun—a measure of the air churned into an ice cream; expressed as a percentage, which reflects the increase in volume of the ice cream greater than the amount of the base used to produce the product

palate—(1) the complex of smell, taste and touch receptors that contribute to a person’s ability to recognize and appreciate flavors; (2) the range of an individual’s recognition and appreciation of flavors

pan-frying—a dry-heat cooking method in which food is cooked in a moderate amount of hot fat

panettone—(pan-eh-TONE-nay) a sweet Italian yeast bread filled with raisins, candied fruits, anise seeds and nuts; traditionally baked in a rounded cylindrical mold and served as a breakfast bread or dessert during the Christmas holidays

papain—an enzyme found in papayas that breaks down proteins; used as the primary ingredient in many commercial meat tenderizers

parbaked—describes bread that has been baked until the gluten structure is set and yeast activity has stopped but without browning; a frequent procedure for preparing bread that will be frozen for resale

parboiling—partially cooking a food in boiling or simmering liquid; similar to blanching, but the cooking time is longer

parchment (paper)—heat-resistant paper used throughout the bakeshop for tasks such as lining baking pans, making pastry cones for piping and covering foods during shallow poaching

parfait—ice cream served in a long, slender glass with alternating layers of topping or sauce; also the name of the mousseline preparation that forms the basis for some still-frozen desserts

Paris-Brest—(pa-REE breast) rings of baked éclair paste cut in half horizontally and filled with light pastry cream and/or whipped cream; the top is dusted with powdered sugar or drizzled with chocolate glaze

Parisienne; Parisian—(1) the smaller scoop on a two-scoop melon ball cutter; (2) small spheres of fruits or vegetables cut with a tiny melon ball cutter

pasteurization—the process of heating something to a prescribed temperature for a specific period in order to destroy pathogenic bacteria

pastillage—(pahst-tee-azh) a paste made of sugar, cornstarch and gelatin; it may be cut or molded into decorative shapes

pastry—may refer to a group of doughs made primarily with flour, water and fat; pastry can also refer to foods made with these doughs or to a large variety of fancy baked goods

pastry bag—a cone-shaped cloth, plastic or parchment bag used to control the application of icings, fillings and batters

pastry cream—also known as *crème pâtissière*; a stirred custard made with egg yolks, sugar and milk and thickened with starch; used for pastry and pie fillings

pâte—(paht) French for “dough”

pâte à bombe—see **bombe mixture**

pâte à choux—(paht ah shoo) see **éclair paste**

pâte brisée—(paht bree-zay) a dough that produces a very flaky baked product containing little or no sugar; flaky dough is used for prebaked pie shells or crusts; mealy dough is a less flaky product used for custard, cream or fruit pie crusts

pâte feuilletée—(paht fuh-yuh-tay) also known as *puff pastry*; a rolled-in dough used for pastries, cookies and savory products; it produces a rich and buttery but not sweet baked product with hundreds of light, flaky layers

pâte sucrée—(paht soo-kray) a dough containing sugar that produces a very rich, crisp (not flaky) baked product; also known as *sweet dough*, it is used for tart shells

pathogen—any organism that causes disease; usually refers to bacteria

pâtissier—(pah-tees-ee-yay) a pastry chef; the person responsible for all baked items, including breads, pastries and desserts

pearl sugar—large-grain sugar formed into opaque pellets for decorating cookies and breads

pectin—a gelatin-like carbohydrate obtained from certain fruits; used to thicken jams and jellies

pH—a measurement of the acid or alkali content of a solution, expressed on a scale of

0 to 14.0. A pH of 7.0 is considered neutral or balanced. The lower the pH value, the more acidic the substance. The higher the pH value, the more alkaline the substance

plasticity—a physical characteristic of fat; its capability of being shaped or molded

poaching—a moist-heat cooking method that uses convection to transfer heat from a hot (approximately 160°F–180°F [71°C–82°C]) liquid to the food submerged in it; used for whole fruits such as apricots, peaches and pears

pomes—members of the Rosaceae family; tree fruits with a thin skin and firm flesh surrounding a central core containing many small seeds (called *pips* or *carpels*); include apples, pears and quince

poolish—French term for a yeast dough sponge fermented for a long period at cool temperatures

pot de crème—(poh duh KHREM) (1) a rich French egg and cream custard; (2) a ceramic or porcelain cup in which custard is baked and served

potentially hazardous foods—foods on which pathogenic bacteria can thrive

preserve—(1) a fruit gel that contains large pieces or whole fruits; (2) to extend the shelf life of a food by subjecting it to a process such as irradiation, canning, vacuum-packing, drying or freezing and/or by adding preservatives

profiterole—(pro-feet-uh-roll) a small round pastry made from éclair paste filled with a savory filling and served as an hors d'oeuvre or filled with ice cream, topped with sauce and served as a dessert

proof box—a heat- and humidity-controlled cabinet in which yeast-leavened dough is placed to rise immediately before baking

proofing—the rise given to shaped yeast products just prior to baking

proteins—a group of compounds composed of oxygen, hydrogen, carbon and nitrogen atoms necessary for manufacturing, maintaining and repairing body tissues and as an alternative source of energy (4 calories per gram); protein chains are constructed of various combinations of amino acids

pudding—a thick, spoonable dessert custard, usually made with eggs, milk, sugar and

flavorings and thickened with flour or another starch

puff pastry—see **pâte feuilletée**

Pullman—a long rectangular loaf of bread for slicing; also, the lidded pan in which this bread is baked

pumpnickel—(1) coarsely ground rye flour; (2) bread made with this flour

punch—to fold dough after it has fermented and risen in order to relax the gluten, reactivate the yeast and allow gases to escape

purée—(pur-ray) (1) to process food to achieve a smooth pulp; (2) food that is processed by mashing, straining or fine chopping to achieve a smooth pulp

quiche—(keesh) a savory tart filled with custard and other ingredients such as cheese, ham and vegetables

quick bread—a bread, including loaves and muffins, leavened by chemical leaveners or steam rather than yeast

quinoa—(keen-wa) tiny, spherical seeds of a plant native to South America, cooked like grain or ground and used as flour

rack oven—an oven in which multiple trays of baked goods are loaded onto racks rolled directly into the oven

ramekin—a small, ovenproof dish, usually ceramic

rancidity—a chemical change in fats caused by exposure to air, light or heat that results in objectionable flavors and odors

recipe—a set of written instructions for producing a specific food or beverage; also known as a *formula*

reduction—a liquid cooked until a portion of it evaporates, reducing the volume of the liquid; used to concentrate flavor and thicken liquids

retardation—chilling a yeasted dough under refrigeration to slow yeast activity and to extend fermentation or proofing time

ripe—(1) describes fully grown and developed fruit; the fruit's flavor, texture and appearance are at their peak and the fruit is ready to eat; (2) describes an unpleasant odor indicating that a food, especially meat, poultry, fish or shellfish, may be past its prime

rognares—(roh-nure) French for “trimmings” or “scraps”; generally refers to scraps of uncooked dough

rolled fondant—a cooked mixture of sugar, glucose syrup and water with the consistency of a dough; draped over cakes to create a perfectly smooth, plasterlike surface

rolled-in dough—a dough in which a fat is incorporated in many layers by using a rolling and folding procedure; it is used for flaky baked goods such as croissants, puff pastry and Danish pastry; also called *laminated dough*

roll-in—(1) a shorthand expression for the butter or other fat used in layering laminated dough; also referred to as *lock-in fat*; (2) the procedure of incorporating fat such as butter into a pastry dough to create hundreds of crisp layers

roulade—(roo-lahd) a filled and rolled spongecake

rounding—the process of shaping dough into smooth, round balls; used to stretch the outside layer of gluten into a smooth coating

royal icing—also known as *decorator's icing*; an uncooked mixture of confectioner's sugar and egg whites that becomes hard and brittle when dry; used for making intricate cake decorations

sabayon—(zah-by-on) also known as *zabaglione*; a foamy, stirred custard sauce made by whisking eggs, sugar and wine over low heat

sanding sugar—granulated sugar with a large, coarse crystal structure that prevents it from dissolving easily; used for decorating cookies and pastries

saturated fats—fats found mainly in animal products and tropical oils; usually solid at room temperature; the body has more difficulty breaking down saturated fats than either monounsaturated or polyunsaturated fats

sauce—generally, a thickened liquid used to flavor and enhance other foods

sautéing—(saw-tay-ing) a dry-heat cooking method that uses conduction to transfer heat from a hot pan to food with the aid of a small amount of hot fat; cooking is usually done quickly over high temperatures

savarin—(sa-va-RAHN) a rich, yeasted cake prepared from baba dough baked into a small

round ring, the center of which may be filled with whipped cream and candied fruit

savory—(1) describes spiced or seasoned, as opposed to sweet, foods; (2) (savoury) a highly seasoned last course of a traditional English dinner

scald—to heat a liquid, usually milk, to just below the boiling point

scale up (down)—to increase (decrease) a recipe or formula mathematically

scaling—measuring ingredients or portions on a scale

score—to cut shallow gashes across the surface of a food before cooking

season—(1) traditionally, to enhance flavor by adding salt; (2) more commonly, to enhance flavor by adding salt and/or pepper as well as herbs and spices; (3) to prepare a pot, pan or other cooking surface to prevent sticking

seasoning—an item added to enhance the natural flavors of a food without dramatically changing its taste; salt is the most common seasoning, although all herbs and spices are often referred to as seasonings

semifreddi—(seh-mee-frayd-dee) also known as *still-frozen desserts*; items made with frozen mousse, custard or cream into which large amounts of whipped cream or meringue are folded in order to incorporate air; layers of spongecake and/or fruits may be added for flavor and texture; includes frozen soufflés, marquise, mousses and neapolitans

service—the process of delivering foods to diners in the proper fashion, appropriately prepared and presented at the correct time

sheeter—a machine for rolling out dough between rollers set over a canvas surface

sherbet—a frozen mixture of fruit juice or fruit purée that contains milk and/or eggs for creaminess

shocking—also called *refreshing*; the technique of quickly chilling blanched or parcooked foods in ice water; prevents further cooking and sets colors

shortening—(1) a white, flavorless, solid fat formulated for baking or deep-frying; (2) any fat used in baking to tenderize the product by shortening gluten strands

showpiece—(Fr. *pièce montée*) a decorative sculpture made from chocolate, sugar or other confections; used as a table display and to demonstrate the skills of the pastry chef

side masking—the technique of coating only the sides of a cake with garnish

sifting—passing one or more dry ingredients through a wire mesh to remove lumps, combine and aerate

simmering—(1) a moist-heat cooking method that uses convection to transfer heat from a hot (approximately 185°F–205°F [85°C–96°C]) liquid to the food submerged in it; (2) maintaining the temperature of a liquid just below the boiling point

simple syrup—a mixture of sugar dissolved in water; used in icings, mousses, frozen desserts and confectionery

smoke point—the temperature at which a fat begins to break down and smoke

solid pack—describes canned fruits or vegetables with little or no water added

sorbet—(sore-bay) a frozen mixture of fruit juice or fruit purée; similar to sherbet but without milk products

sorghum—(1) grain harvested from a plant that resembles corn, used primarily for animal feed and food processing applications; also called *milo*; when ground, sorghum may be blended with other flours to make gluten-free preparations; (2) a dark, thick, sweet syrup similar to molasses

soufflé—(soo-flay) either a sweet or savory fluffy dish made with a custard base lightened with whipped egg whites and then baked; the whipped egg whites cause the dish to puff when baked

sourdough—a fermented mixture of flour and water added to dough for leavening and flavoring

specific gravity—the weight of an ingredient or a mixture in relation to the weight of water

spice—any of a group of strongly flavored or aromatic portions of plants (other than leaves) used as flavorings, condiments or aromatics; usually used in dried form, either whole or ground

sponge—a thick flour-and-water batter, which may or may not contain commercial

yeast; used to improve the flavor and texture of yeast breads

sponge method—a yeast dough mixing method in which flour, water and sometimes yeast are premixed and allowed to ferment; after the sponge has fermented, the remainder of the formula ingredients are incorporated

spread—the flattening of cookie dough when it heats and bakes, controlled by the formula, ingredients (especially sugar and fat) and temperature

springform pan—a baking pan with a separate bottom and side wall held together with a clamp that is released to free the baked product

spun sugar—a decoration made by flicking caramelized sugar rapidly over a dowel to create long, fine, hairlike threads

staling—*see* starch retrogradation

standardized recipe—a recipe producing a known quality and quantity of food for a specific operation

starch—complex carbohydrates from plants that are edible and either digestible or indigestible (fiber); often used as thickening agents

starch retrogradation—the process whereby starch molecules in a batter or dough lose moisture after baking; the result is baked goods that are dry or stale

steaming—a moist-heat cooking method in which heat is transferred from steam to the food being cooked by direct contact; the food to be steamed is placed in a basket or rack above a boiling liquid in a covered pan

steep—to soak food in a hot liquid in order to either extract its flavor or impurities or soften its texture

St. Honoré—the patron saint of the pastry chef; also the name for a light, crisp pastry composed of puff pastry topped with cream puffs filled with custard and coated with hard caramel; also the name for a piping tip that produces a wedge-shaped design, which is often used to pipe in the filling

stirring—a mixing method in which ingredients are gently mixed by hand until evenly blended, usually with a spoon, whisk or rubber spatula

stollen—(STOH-lunn) a sweet German yeast bread filled with dried fruit and marzipan,

shaped like a folded oval coated with powdered sugar

stone fruits—members of the genus *Prunus*, also known as *drupes*; tree or shrub fruits with a thin skin, soft flesh and one woody stone or pit; include apricots, cherries, nectarines, peaches and plums

straight dough method—a mixing method for yeast breads in which all ingredients are simply combined and mixed; also known as the *direct method*

strain—to pour foods through a sieve, mesh strainer or cheesecloth to separate or remove the liquid component

streudel—(stroo-DUL) a layered pastry filled with cooked fruit, nuts and the like

streusel—(stroo-zel) a crumbly mixture of fat, flour, sugar and sometimes nuts and spices; used to top baked goods

sucrose—the chemical name for refined or table sugar; it is refined from the raw sugars found in the large tropical grass called sugarcane and the root of the sugar beet; a disaccharide composed of one molecule each of glucose and fructose

sugar—a carbohydrate that provides the body with energy and gives a sweet taste to foods

sugar beet—(*Beta vulgaris*) a plant with a high concentration of sucrose in its root; a major source of refined sugar

sugarcane—(*Saccharum officinarum*) a tropical grass native to Southeast Asia; the primary source of sugar

sugar syrups—either simple syrups (thin mixtures of sugar and water) or cooked syrups (melted sugar cooked until it reaches a specific temperature)

sundae—a great and gooey concoction of ice cream, sauces (hot fudge, marshmallow and caramel, for example), toppings (nuts, candies and fresh fruit) and whipped cream

supreme—an intact segment of citrus fruit with all membrane removed

syrup pack—describes canned fruits with a light, medium or heavy syrup added

tart—(1) a sweet or savory filling in a baked crust made in a shallow, straight-sided pan without a top crust; (2) a flavor that is sharp, acidic or sour

tartlet—a small, single-serving tart

taste—the sensations, as interpreted by the brain, of what we detect when food, drink or other substances come into contact with our taste buds

temperature danger zone—the broad range of temperatures between 41°F and 135°F (5°C and 57°C) at which bacteria multiply rapidly

tempering—(1) heating gently and gradually; refers to the process of slowly adding a hot liquid to eggs or other foods to raise their temperature without causing them to curdle; (2) a process for melting chocolate during which the temperature of the cocoa butter is carefully stabilized; this keeps the chocolate smooth and glossy

thickening agents—ingredients used to thicken liquids; include starches (flour, cornstarch and arrowroot) and gelatin

torte—in Central and Eastern European usage, refers to a rich cake in which all or part of the flour is replaced with finely chopped nuts or bread crumbs; also refers to any multilayered sweet cake

transfer sheets—flexible sheets of acetate printed with edible designs; used to apply decorative patterns and images onto tempered chocolate

trimoline—invert sugar syrup used commercially to prevent crystallization in candies and fondant fillings

truffles—(1) rich chocolate candies made with ganache; (2) an edible fungus considered a delicacy

tube pan—a deep round baking pan with a hollow tube in the center

tunneling—the holes that may form in baked goods as the result of overmixing

turns—the number of times that laminated dough is rolled and folded

umami—often called the “fifth taste”; refers to the rich, full taste perceived in the presence of the natural amino acid glutamate and its commercially produced counterpart known as *monosodium glutamate* (MSG); cheeses, meats, rich stocks, soy sauce, shellfish, fatty fish, mushrooms, tomatoes and wine are all high in glutamate

unsaturated fats—fats that are normally liquid (oils) at room temperature; they may be monounsaturated (from plants such as olives

and avocados) or polyunsaturated (from grains and seeds such as corn, soybeans and safflower as well as from fish)

vacherin—(VACH-ran) a baked meringue disk or cake layered with ice cream

vanilla custard sauce—also known as *crème anglaise*; a stirred custard made with egg yolks, sugar and milk or half-and-half and flavored with vanilla; served with or used in dessert preparations

vanillin—(1) whitish crystals of vanilla flavor that often develop on vanilla beans during storage; (2) synthetic vanilla flavoring

vegetarianism—eating a plant-based diet; ovo vegetarians eat eggs; lacto vegetarians eat some dairy; ovo-lacto vegetarians eat eggs and dairy; vegans consume no animal products of any kind

vent—(1) to allow the circulation or escape of a liquid or gas; (2) to cool a pot of hot liquid by setting the pot on blocks in a cold-water bath and allowing cold water to circulate around it

Viennese table—a lavish dessert buffet offered at receptions and catered events featuring an assortment of sliced tortes, elegant pastries, mousses, fruits and confections

Viennoiserie—(vienneh-wah-zer-ee) term applied to the category of enriched pastry doughs that includes brioche, croissants, Danish pastries and other laminated dough products

vinegar—a thin, sour liquid used as a preservative, cooking ingredient and cleaning solution

vol-au-vents—(vul-oh-vanz) deep, individual portion-sized puff pastry shells; often filled with a savory mixture and served as an appetizer or a main course

volume—the space occupied by a substance; volume measurements are commonly expressed as liters, teaspoons, tablespoons, cups, pints and gallons

wash—a glaze applied to dough before baking; a commonly used wash is made with whole egg and water

water bath—*see* **bain marie**

water pack—describes canned fruit with water or fruit juice added

weight—the mass or heaviness of a substance; weight measurements are commonly expressed as grams, ounces and pounds

whipping—a mixing method in which foods are vigorously beaten to incorporate air; a whisk or electric mixer fitted with a whip is used

whole butter—butter that is not clarified, whipped or reduced in fat content; it may be salted or unsalted

windowpane test—a procedure to check that yeast dough has been properly kneaded; a

piece of the kneaded dough is pulled apart to see if it stretches without breaking

wine—an alcoholic beverage made from the fermented juice of grapes; may be sparkling (effervescent) or still (noneffervescent) or fortified with additional alcohol

work station—a work area in the kitchen dedicated to a particular task, such as broiling or salad making; work stations using the same or similar equipment for related tasks are grouped together into work sections

xanthan gum—a stabilizer produced by fermenting the sugars in corn; used to thicken, stabilize and emulsify prepared sauces, dairy products, ice creams and baked goods

yeasts—microscopic fungi whose metabolic processes are responsible for fermentation; they are used for leavening bread and in cheese, beer and wine making

yield—the total amount of a product produced by a formula expressed in total weight, volume or number of units of the product

zabaglione—*see* **sabayon**

zest—the thin, colored outer portion of the rind of citrus fruit; contains the oil that provides flavor and aroma

