WAYNE GISSLEN

PROFESSIONAL COOKING





WAYNE GISSLEN

ESSENTIALS OF PROFESSIONAL COOKING

Photography by J. Gerard Smith





This book is dedicated to the many Chef-Instructors preparing a new generation of culinary professionals



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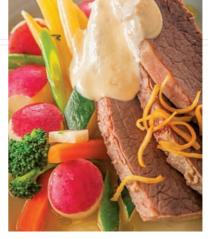
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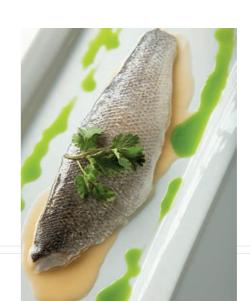
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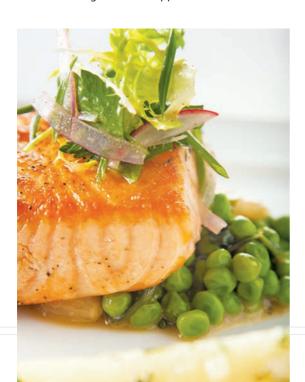
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PREFACE

The Second Edition of *Essentials of Professional Cooking* presents a streamlined approach to the basics of professional food preparation. If you are familiar with my book *Professional Cooking*, you will know the basics of this new and updated edition of Essentials. The fundamentals here are the same, and the clear, systematic explanation of the principles and procedures that form the core of **Professional Cooking** and that have made the text a standard in the industry also provide the foundation of *Essentials*. The streamlined approach in this new text is designed to extend the benefits of this material to additional students of professional cooking as well as to students in related fields such as hospitality management and nutrition and dietetics.

The needs of these different groups of students are varied, but the focus on basic techniques in this book ensures that they will all find what they need in these pages. Students of the culinary arts need a strong foundation in basic techniques, procedures, and cooking theory. Students in hospitality management programs need to understand the language of the kitchen so they can communicate with kitchen workers, and they must acquire a good understanding of kitchen procedures. Other students, such as those in nutrition and dietetics programs, also need to master a basic understanding of the processes and procedures used in the kitchens of all types of food service operations.

The Procedures and the Recipes

The focus of the book is on procedures and techniques. This approach to cooking is what distinguishes professional cooking from traditional casual or amateur cooking, which is based on recipes, whether written or memorized. A professional thinks in terms of fundamental procedures, such as roasting, sautéing, braising, or grilling. Once the principles and guidelines of these basic procedures are learned, the cook applies this knowledge to the preparation of specific dishes, but instead of blindly following the recipe, the cook understands the functions of the ingredients and the reasons for and desired results of each step of the procedure. Understanding basic procedures thus gives the cook maximum flexibility in the kitchen.

Attention to the basics has always been the hallmark of *Professional* Cooking, and this is no less true of Essentials of Professional Cooking. Because the purpose of the text is to teach fundamental cooking techniques, it is important to illustrate these techniques—and to allow the student to experiment with them—with fundamental, straightforward recipes that reveal the connection between the general theory and specific applications in the most direct way. The selection of recipes in this text focuses only on those that show this connection most clearly. For students in such programs as hospitality management and nutrition and dietetics, these recipes will likely be all that are needed. For culinary arts programs, the instructor may wish to supplement the basics with his or her own additional selection of recipes. This approach gives teachers maximum flexibility to tailor their lab classes to their own goals.

There are four icons throughout the recipes in the book. They indicate particular features of those recipes:



core recipes

Core recipes, which follow a procedure and have been chosen to reinforce a fundamental technique



indicating recipes suitable for a vegetarian vegetarian diet

international recipes

International recipes, which reflect the important role international and regional cuisines play in the evolution of North American cooking



low in fat recipes

Low in fat recipes, based on FDA guidelines and labeling laws

Vegetarian recipes,

NUTRITIONAL INFORMATION

Cooks and chefs are increasingly aware of the importance of preparing healthful foods. To support this effort, nutritional analyses are included for each main recipe. These analyses were done using the software program Genesis R&D 8.4.0, which calculates nutrients based on ingredients. It is important to realize that the actual nutrients in a prepared dish will vary depending on many factors, just as the taste, texture, and appearance of the dish will vary with the skill of the cook and the quality of the ingredients. The following factors should also be taken into account when reading the nutritional analyses:

Where a portion size is indicated in the recipe, the analysis is per portion. Where there is no portion size, as for stock and sauce recipes as well as most of the recipes in the baking chapters, the analysis is usually per ounce (28.35 g) or per fluid ounce (29.57 mL); for most hors d'oeuvre recipes, analysis is per piece.

- The following ingredients are not included in the analyses: ingredients listed "to taste" or "as needed"; ingredients in sachets and bouquetsgarnis; optional ingredients; garnishes such as parsley sprigs.
- · Stocks are adjusted for removal of bones, mirepoix, and other ingredients that are strained out.
- · Ingredients in mirepoix are not included, except for a small amount of
- If a range is given for an ingredient quantity, the smaller number was used for analysis.
- Adjustments are made for recipes in which the food is degreased or the fat is skimmed off. The amount of fat remaining will vary depending on how thoroughly the item is degreased.
- Fat was calculated for pan-fried and deep-fried foods based on a percentage of the total weight. The amount of fat actually absorbed will vary depending on the temperature of the fat, the cooking time, and the surface area of the food.
- · For marinated foods, 10 percent of the marinade is included in the analysis, unless the marinade is used to make a sauce, in which case all the marinade is, of course, included.
- The amount of fat used for sautéing was estimated for the analysis.
- The numbers for each nutrient are rounded off according to FDA rounding rules for food labeling.
- The "(% cal.)" information following the fat content in each analysis refers to percentage of calories from fat, and is required to determine whether a recipe can be labeled as low in fat. It can't be used to determine percentage of fat in the total diet.

FEATURES

Pronunciation Guides and Glossaries

Much kitchen terminology is taken from French. Phonetic guides are included for difficult words, giving the approximate pronunciation using English sounds. (Exact rendering is impossible in many cases because French and other foreign languages have sounds that don't exist in English.) Because food-service workers must be able to communicate with each other, definitions of terms introduced in the text are summarized in the glossary at the end of the book.

Illustrations

Hundreds of clear, concise, full-color photographs illustrate basic manual techniques shown from the point of view of the person performing them. Additional photographs illustrate ingredients and finished dishes. Numerous line drawings also enhance the text, illustrating hundreds of pieces of equipment you'll encounter in the professional kitchen.

Realistic Procedures

Although supported by discussions of cooking theory, procedures given here are based on actual practices in the industry. Attention is given not just to quantity production but also to the special problems of cooking to order. Presentation and service of the finished product are considered in detail, as is pre-preparation, or mise en place—so essential to the organization of a working restaurant. At the same time, the major emphasis is on quality, too often neglected in the guest for convenience.

Even a book as large as this one cannot possibly contain all a cook needs to know. Other information is included if it has a direct bearing on kitchen and bakeshop work. More specialized information, such as stewarding and managerial skills, is necessarily omitted. Finally, although much of what we talk about is strongly influenced by the cooking of other nations, the practices discussed are primarily those of North American food service.

RESOURCES AND SUPPLEMENTS

CulinarE-Companion™ Recipe Management Software

CulinarE-Companion™ is now *web-based*. You can set up an account and have instant access to this recipe management resource with a complete database of recipes from *Essentials of Professional Cooking, viewable from any device's browser, whether a laptop, desktop, tablet, or mobile device.* See page ix in this section for more information.

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A place where students can define their strengths and nurture their skills, **WileyPLUS Learning Space** transforms course content into an online learning community. **WileyPLUS Learning Space** invites students to experience learning activities, work through self-assessment, ask questions and share insights. As students interact with the course content, each other, and their instructor, **WileyPLUS Learning Space** creates a personalized study guide for each student. Through collaboration, students make deeper connections to the subject matter and feel part of a community.

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Defining a clear path to action, the visual reports in **WileyPLUS Learning Space** help both you and your students gauge problem areas and act on what's most important.

Additional Student and Instructor Resources

The following student and instructor supplements are also available: Student Study Guide (978-1-119-01691-5) contains review materials, practice problems, and exercises. (Answers are found in the Instructor's Manual)

The online *Instructor's Manual* includes teaching suggestions and test bank questions and is available to qualified adopters from this book's web site at **www.wiley.com/college/gisslen**. Instructors who adopt *Essentials of Professional Cooking* can download the test bank free. In addition, there is a wealth of Instructor support materials including the *Study Guide* solutions, PowerPoint slides, and an image gallery. Please visit the Instructor resource site on **wiley.com**.

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During a long and productive session of planning, photography, and recipe testing, I was fortunate to have the expert assistance of Chef Tim Bucci of Joliet Junior College. Tim is a master of modern culinary technique and the creation of artistic food presentations. I am grateful for Tim's participation, as well as his friendship.

Our photography sessions benefited from the contributions of time and talent by Chef Instructor Rick Forpahl of Minneapolis Community & Technical College, as well as Eric Ervasti and Choden Bhutia, students of Chef Instructor David Eisenreich of Hennepin Technical College. These chefs have been valuable collaborators on several editions of my books, and their suggestions and critiques have been significant in shaping each revision project. In addition, Rick Elsenpeter of Lund's market was untiring in his responses to innumerable special requests for meats and seafood. My wife, Meg, assisted our kitchen crew and helped with my research for many of the text revisions. I am grateful to one and all for their help. They were a pleasure to work with.

Photographer Jim Smith has been my partner in these texts for more than 30 years. His hundreds of photographs are an indispensable part of this book and valuable teaching tools. I can never thank him enough. Thanks also to Michael Haight for his work in Jim's studio and on the set in my kitchen.

The technique videos available in **WileyPLUS Learning Space** could not have been accomplished so successfully without the on-air talent of Chef Ambarush Lulay, Chef Klaus Tenbergen, Chef Melina Kelson, and most especially, Chef Lisa Brefere and Chef Andy Chlebana. Both Lisa and Andy played an incalculable role in scripting, planning, executing, and ensuring each video meets the professional kitchen standards. Many thanks as well to Kendall College and the College of DuPage for the gracious use of their kitchens in the filming of many of the technique videos.

Christin Loudon has provided analyses for the recipes in this edition, for which I thank her most warmly. I would also like to thank Drew Appleby, whose expertly written test questions form an important part of the support materials for this text. The list of culinary and hospitality professionals who have provided support, guidance, advice, and constructive criticism that have helped over the years to develop this new text has grown so long that it isn't possible to mention everyone in these paragraphs. I can only hope I have not omitted many of them in the list of reviewers that follows. I would also like to thank all those unnamed individuals who have corresponded with me over the years to point out errors and to offer suggestions.

The updated and enhanced **CulinarE-Companion™** and **WileyPLUS Learning Space** accompany this new edition because of a coordinated team effort. I am also grateful to the many beta testers who took time to test our digital solutions. Their testing and feedback were instrumental in the development and completion of these exciting new technologies. Thanks also to Chef Jean Vendeville of Savannah Technical College for his review and input for the audio pronunciations that is included in our digital products. Thank you to Chef Danielle Gleason, Chef Instructor, Sullivan University, for creating the PowerPoints.

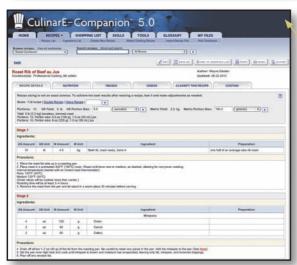
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WILEY CULINARE-COMPANIONTM RECIPE MANAGEMENT SOFTWARE

Supporting chefs and foodservice managers throughout their careers, *CulinarE-Companion*TM includes all recipes from *Essentials of Professional Cooking, Second Edition*, plus hundreds of color photographs, audio pronunciations, and illustrated procedures. Create shopping lists, resize recipes, perform metric conversions, and analyze nutritional content of ingredients and recipes with the software. You can also add your own recipes and photos, link to external videos, and create your own cookbooks.

The software is now Web-based! Your personal registration code and instructions are included with your purchased copy of **Essentials of Professional Cooking, Second Edition**. Go to **cec.wiley.com** to access the software. Once you create a user name and password, you can log onto **CulinarE-Companion** from your computer, tablet, or mobile device.







THE HOMEPAGE

- Link directly to any of the cookbooks, including cookbooks you created.
- View recipes that have been recently seen or all recipes by selecting the RECIPES tab. Perform either a basic or an advanced search based on specified criteria, such as recipe name or even part of a name, cookbook, ingredients, and cooking method.
- View recipes and procedures organized by kitchen skill when you click on the SKILLS tab.
- Select the GLOSSARY tab to access definitions from Essentials of Professional Cooking's glossary, as well as hundreds of additional defined terms and audio pronunciations.

RECIPE LIST

- Scroll through an alphabetical list of all recipes in the application.
- Refine the recipe listing by category, course, cuisine, main ingredient, primary cooking method, or dietary considerations.
- Add recipes to your shopping list, as well as export and print recipes.

RECIPE SCREEN

- Resize recipes, perform metric conversions, show recipe notes, variations, and more!
- View referenced procedures by simply clicking on the relevant highlighted term.
- Click the IMAGES tab to see photos of plated dishes or to add your own photos and links to external videos.

COSTING INFORMATION

- Calculate food costs for a total recipe cost or a cost per portion of a recipe by selecting the COSTING tab.
- Add or edit existing cost data for individual ingredients from a shopping list or a recipe.

NUTRITIONAL INFORMATION

- View nutritional information for ingredients and recipes.
- Access the USDA Nutrient Data Laboratory if additional nutrition information is necessary.



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- Gain immediate insights to help inform teaching

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- Assess progress along the way
- Participate in class discussions
- Remember what you have learned because you have made deeper connections to the content

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1 THE FOOD-SERVICE INDUSTRY



This is an exciting time to begin a career in food service. Interest in dining and curiosity about new foods are greater than ever. More new restaurants open every year. Many restaurants are busy every night, and restaurant chains number among the nation's largest corporations. The chef, once considered a domestic servant, is now respected as an artist and skilled craftsperson.

The growth of the food-service industry creates a demand for thousands of skilled people every year. Many people are attracted by a career that is challenging and exciting and, above all, provides the chance to find real satisfaction in doing a job well.

Unfortunately, many people see only the glamorous side of food service and fail to understand that this is a tiny part of the picture. The public does not often see the years of training, the long hours, and the tremendous pressures that lie behind every success.

Before you start your practical studies, covered in later chapters, it is good to know a little about the profession you are entering. This chapter gives you a brief overview of modern food service, including how it got to where it is today and where it is headed.

AFTER READING THIS CHAPTER, YOU SHOULD BE ABLE TO

- 1. Name and describe four major developments that significantly changed the food-service industry in the twentieth century.
- **2.** Identify seven major stations in a classical kitchen.
- **3.** Explain how the size and type of an operation influence the organization of the modern kitchen.
- **4.** Identify and describe three skill levels of food production personnel.



THE ORIGINS OF CLASSICAL AND MODERN CUISINE

Modern food service began shortly after the middle of the 1700s, when a Parisian named Boulanger began selling dishes that he referred to as "restoratives" (the French verb restaurant means "restoring"). Before this time, guests had little choice of foods and simply ate whatever meal the innkeeper was serving, Boulanger's customers could choose from a variety of selections.

Not long afterward, many private chefs for aristocratic families found themselves out of work, as a result of the French Revolution, and opened restaurants to support themselves.

The great chef following this era was Marie-Antoine Carême (1784-1833). He is credited as the founder of classical cuisine. His many books contain the first really systematic account of cooking principles, recipes, and menu making. He became famous for elaborate and elegant showpieces, but his practical and theoretical work helped bring cooking out of the Middle Ages and into the modern period.





Georges-Auguste Escoffier. Courtesy of Adjointe à la Conservation du Musée Escoffier de l'Art Culinaire.

A HISTORY OF MODERN FOOD SERVICE

The value of history is that it helps us understand the present and the future. In food service, knowledge of our professional heritage helps us see why we do things as we do, how our cooking techniques have been developed and refined, and how we can continue to develop and innovate in the years ahead.

An important lesson of history is that the way we cook now is the result of the work done by countless chefs over hundreds of years. Cooking is as much science as it is art. Cooking techniques are not based on arbitrary rules some chefs made up long ago. Rather, they are based on an understanding of how different foods react when heated in various ways, when combined in various proportions, and so on. The chefs who have come before us have already done much of this work so we don't have to.

This doesn't mean there is no room for innovation and experimentation or that we should never challenge old ideas. But it does mean a lot of knowledge has been collected over the years, and we would be smart to take advantage of what has already been learned. Furthermore, how can we challenge old ideas unless we know what those old ideas are? Knowledge is the best starting point for innovation.

ESCOFFIER

Georges-Auguste Escoffier (1847–1935), the greatest chef of his time, is still revered by chefs and gourmets as the father of twentieth-century cookery. His two main contributions were (1) the simplification of classical cuisine and the classical menu, and (2) the reorganization of the kitchen.

Escoffier's books and recipes are still important reference works for professional chefs. The basic cooking methods and preparations we study today are based on Escoffier's work. His book *Le Guide Culinaire*, which is still widely used, arranges recipes in a simple system based on main ingredient and cooking method, greatly simplifying the more complex system handed down from Carême. Learning classical cooking, according to Escoffier, begins with learning a relatively few basic procedures and understanding basic ingredients.

Escoffier's second major achievement, the reorganization of the kitchen, resulted in a streamlined workplace better suited to turning out the simplified dishes and menus he instituted. The system of organization he established is still in use, especially in large hotels and full-service restaurants, as we discuss later in this chapter.

MODERN TECHNOLOGY

Today's kitchens look much different from those of Escoffier's day, even though our basic cooking principles are the same. Also, the dishes we eat have gradually changed due to the innovations and creativity of modern chefs. The process of simplification and refinement, to which Carême and Escoffier made monumental contributions, is ongoing, adapting classical cooking to modern conditions and tastes.

Before we discuss the changes in cooking styles that took place in the twentieth century, let's look at some of the developments in technology that affected cooking.

Development of New Equipment

We take for granted such basic equipment as gas and electric ranges and ovens and electric refrigerators. But even these essential tools did not exist until fairly recently. The easily controlled heat of modern cooking equipment, as well as motorized food cutters, mixers, and other processing equipment, has greatly simplified food production.

Research and technology continue to produce sophisticated tools for the kitchen. Some of these products, such as tilting skillets and steam-jacketed kettles, can do many jobs and are popular in many kitchens. Others can perform specialized tasks rapidly and

efficiently, but their usefulness depends on volume because they are designed to do only a few jobs.

Modern equipment has enabled many food-service operations to change their production methods. With sophisticated cooling, freezing, and heating equipment, it is possible to prepare some foods further in advance and in larger quantities. Some large multiunit operations prepare food for all their units in a central commissary. The food is prepared in quantity, packaged, chilled or frozen, and then heated or cooked to order in the individual units.

Development and Availability of New Food Products

Modern refrigeration and rapid transportation caused revolutionary changes in eating habits. For the first time, fresh foods of all kinds—meats, fish, vegetables, and fruits—became available throughout the year. Exotic delicacies can now be shipped from anywhere in the world and arrive fresh and in peak condition.

The development of preservation techniques—not just refrigeration but also freezing, canning, freeze-drying, vacuum-packing, and irradiation—increased the availability of most foods and made affordable some that were once rare and expensive.

Techniques of food preservation have had another effect. It is now possible to do some or most of the preparation and processing of foods before shipping rather than in the foodservice operation itself. Thus, convenience foods have come into being. Convenience foods continue to account for an increasing share of the total food market.

Some developments in food science and agriculture are controversial. Irradiation, mentioned above, caused much controversy when it was introduced because it exposes foods to radioactivity to rid them of organisms that cause spoilage and disease. Scientists say, however, that no traces of radioactivity remain in the foods, and the procedure is now used more widely.

A more controversial technique is genetic engineering, which involves artificially changing the gene structure of a food to give it some desirable trait, such as resistance to disease, drought, or insect damage.

Food Safety and Nutritional Awareness

The development of the sciences of microbiology and nutrition had a great impact on food service. One hundred years ago, there was little understanding of the causes of food poisoning and food spoilage. Food-handling practices have come a long way since Escoffier's day.

Also, little knowledge of nutritional principles was available until fairly recently. Today, nutrition is an important part of a cook's training. Customers are also more knowledgeable and therefore more likely to demand healthful, well-balanced menus. Unfortunately, nutrition science is constantly shifting. Diets considered healthful one year become eating patterns to be avoided a few years later. Fad diets come and go, and chefs often struggle to keep their menus current. It is more important than ever for cooks to keep up to date with the latest nutritional understanding.

Complicating the work of food-service professionals is a growing awareness of food allergies and intolerances. Not only are chefs called upon to provide nutritious, low-fat, low-calorie meals, they must also adapt to the needs of customers who must eliminate certain foods from their diets, such as gluten, soy, dairy, or eggs.

COOKING IN THE TWENTIETH AND TWENTY-FIRST CENTURIES

All these developments have helped change cooking styles, menus, and eating habits. The evolution of cuisine that has been going on for hundreds of years continues. Changes occur not only because of technological developments, such as those just described, but also because of our reactions to culinary traditions.

Two opposing forces can be seen at work throughout the history of cooking. One is the urge to simplify, to eliminate complexity and ornamentation, and instead to emphasize the plain, natural tastes of basic, fresh ingredients. The other is the urge to invent, to highlight the creativity of the chef, with an accent on fancier, more complicated presentations and procedures. Both these forces are valid and healthy; they continually refresh and renew the art of cooking.

A generation after Escoffier, the most influential chef in the middle of the twentieth century was Fernand Point (1897–1955). Working quietly and steadily in his restaurant, La Pyramide, in Vienne, France, Point simplified and lightened classical cuisine. He was a perfectionist who sometimes worked on a dish for years before he felt it was good enough to put on his menu.

Point's influence extended well beyond his own life. Many of his apprentices, including Paul Bocuse, Jean and Pierre Troisgros, and Alain Chapel, later became some of the greatest stars of modern cooking. They, along with other chefs in their generation, became best known in the 1960s and early 1970s for a style of cooking called **nouvelle cuisine**. Reacting to what they saw as a heavy, stodgy, overly complicated classical cuisine, these chefs took Point's lighter approach even further. They rejected many traditional principles, such as the use of flour to thicken sauces, and instead urged simpler, more natural flavors and preparations, with lighter sauces and seasonings and shorter cooking times. In traditional classical cuisine, many dishes were plated in the dining room by waiters. Nouvelle cuisine, however, placed a great deal of emphasis on artful plating presentations done by the chef in the kitchen.

New Emphasis on Ingredients

Advances in agriculture and food preservation have had disadvantages as well as advantages. Everyone is familiar with hard, tasteless fruits and vegetables developed to ship well and last long, without regard for eating quality. Many people, including chefs, began to question not only the flavor but also the health value and the environmental effects of genetically engineered foods, of produce raised with chemical pesticides and fertilizers, and of animals raised with antibiotics and other drugs and hormones.

A prominent organization dedicated to improving food quality is Slow Food, begun in Italy in 1986 in reaction to the spread of fast-food restaurants. Slow Food has since become a global movement, with chapters in cities around the world. It emphasizes fostering locally grown food, using organic and sustainable farming practices, preserving heirloom varieties of plants and animals, and educating consumers about the food they eat.

Concern for quality of ingredients has led many chefs to support and to purchase from farmers who practice **sustainable agriculture**. This term refers to methods of raising healthful food in a way that is profitable to farms and farming communities and that provides living wages and benefits to workers while at the same time preserving and enhancing the soil, water, and air. Sustainable farming treats workers justly and raises animals in humane conditions. Farmers continually work to increase the fertility and conservation of soil and avoid the use of synthetic pesticides and herbicides as much as possible. The goal is to manage farmlands so that they not only will be profitable but will continue to be productive indefinitely.

Chefs can carry the concept of sustainability into their own operations by using renewable power sources, installing energy-efficient equipment, and recycling as many waste materials as possible.

International Influences

After the middle of the twentieth century, as travel became easier and as new waves of immigrants arrived in Europe and North America from around the world, awareness of and taste for regional dishes grew. Chefs became more knowledgeable not only about the traditional cuisines of other parts of Europe but about those of Asia, Latin America, and elsewhere. Many of the most creative chefs have been inspired by these cuisines and use some of their techniques and ingredients. For example, many North American and French chefs, looking for ways to make their cooking lighter and more elegant, have found ideas in the cuisine of

Japan. In the southwestern United States, a number of chefs have transformed Mexican influences into an elegant and original cooking style. Throughout North America, traditional dishes and regional specialties combine the cooking traditions of immigrant settlers and the indigenous ingredients of a bountiful land. For many years, critics often argued that menus in most North American restaurants offered the same monotonous, mediocre food. In recent decades, however, American and Canadian cooks have rediscovered traditional North American dishes.

The use of ingredients and techniques from more than one regional, or international, cuisine in a single dish is known as **fusion cuisine**. Early attempts to prepare fusion cuisine often produced poor results because the dishes were not true to any one culture and were

too mixed up. This was especially true in the 1980s, when the idea of fusion cuisine was new. Cooks often combined ingredients and techniques without a good feeling for how they would work together. The result was sometimes a jumbled mess. But chefs who have taken the time to study in depth the cuisines and cultures they borrow from have brought new excitement to cooking and to restaurant menus.

New Technologies

As described on pages 2-3, new technologies, from transportation to food processing, had a profound effect on cooking in the twentieth century. Such changes continue today, with scientific developments that are only beginning to have an effect on how cooks think about food and menus.

One of these technologies is the practice of cooking sous vide (soo veed, French for "under vacuum"). Sous vide began simply as a method for packaging and storing foods in vacuum-sealed plastic bags. Modern chefs, however, are exploring ways to use this technology to control cooking temperatures and times with extreme precision. As a result, familiar foods have emerged with new textures and flavors. (Sous vide cooking is discussed further in Chapter 6.)

KEY POINTS TO REVIEW

- How have the following developments changed the foodservice industry: development of new equipment; availability of new food products; greater understanding of food safety and nutrition?
- How have international cuisines influenced and changed cooking in North America?

THE ORGANIZATION OF MODERN KITCHENS

THE BASIS OF KITCHEN ORGANIZATION

The purpose of kitchen organization is to assign or allocate tasks so they can be done efficiently and properly and so all workers know what their responsibilities are.

The way a kitchen is organized depends on several factors.

1. The menu.

The kinds of dishes to be produced obviously determine the jobs that must be done. The menu is, in fact, the basis of the entire operation. Because of its importance, we devote a major section of Chapter 4 to a study of the menu.

2. The type of establishment.

The major types of food-service establishments are as follows:

- Hotels
- Institutional kitchens

Schools

Hospitals, nursing homes, and other health care institutions

Retirement community and assisted living facilities

Employee lunchrooms and executive dining rooms

Airline catering

Military food service

Correctional institutions

- Private clubs
- Catering and banquet services
- Fast-food restaurants
- Carry-out or take-out food facilities, including supermarkets
- Full-service restaurants
- Private homes (personal chefs)
- **3.** The size of the operation (the number of customers and the volume of food served).
- 4. The physical facilities, including the equipment in use.

THE CLASSICAL BRIGADE

As you learned earlier in this chapter, one of Escoffier's important achievements was the reorganization of the kitchen. This reorganization divided the kitchen into departments, or stations, based on the kinds of foods produced. A station chef was placed in charge of each department. In a small operation, the station chef might be the only worker in the department. But in a large kitchen, each station chef might have several assistants.

This system, with many variations, is still in use, especially in large hotels with traditional kinds of food service. The major positions are as follows:

- The chef is the person in charge of the kitchen. In large establishments, this person has
 the title of executive chef. The executive chef is a manager who is responsible for all aspects of food production, including menu planning, purchasing, costing, planning work
 schedules, hiring, and training.
- 2. If a food-service operation is large, with many departments (for example, a formal dining room, a casual dining room, and a catering department), or if it has several units in different locations, each kitchen may have a **chef de cuisine**. The chef de cuisine reports to the executive chef.
- 3. The **sous chef** (**soo** shef) is directly in charge of production and works as the assistant to the executive chef or chef de cuisine. (The word **sous** is French for "under.") Because the executive chef's responsibilities may require a great deal of time in the office, the sous chef often takes command of the actual production and the minute-by-minute supervision of the staff.
- **4.** The station chefs, or *chefs de partie*, are in charge of particular areas of production. The following are the most important station chefs.
 - The sauce chef, or saucier (so-see-ay), prepares sauces, stews, and hot hors
 d'oeuvres, and sautés foods to order. This is usually the highest position of all the
 stations.
 - The fish cook, or poissonier (pwah-so-nyay), prepares fish dishes. In some kitchens, this station is handled by the saucier.
 - The vegetable cook, or entremetier (awn-truh-met-yay), prepares vegetables, soups, starches, and eggs. Large kitchens may divide these duties among the vegetable cook, the fry cook, and the soup cook.
 - The roast cook, or rôtisseur (ro-tee-sur), prepares roasted and braised meats and their gravies and broils meats and other items to order. A large kitchen may have a separate broiler cook, or grillardin (gree-ar-dan), to handle the broiled items. The broiler cook may also prepare deep-fried meats and fish.

- The pantry chef, or garde manger (gard mawn-zhay), is responsible for cold foods, including salads and dressings, pâtés, cold hors d'oeuvres, and buffet items.
- The *pastry chef*, or *pâtissier* (pa-tees-*syay*), prepares pastries and desserts.
- The *relief cook*, *swing cook*, or **tournant** (toor-*nawn*), replaces other station heads.
- The expediter, or aboyeur (ah-bwa-yer), accepts orders from waiters and passes them on to the cooks on the line. The expediter also calls for orders to be finished and plated at the proper time and inspects each plate before passing it to the dining room staff. In many restaurants, this position is taken by the head chef or the sous chef.
- 5. Cooks and assistants in each station or department help with the duties assigned to them. For example, the assistant vegetable cook may wash, peel, and trim vegetables. With experience, assistants may be promoted to station cooks and then to station chefs.

MODERN KITCHEN ORGANIZATION

As you can see, only a large establishment needs a staff like the classical brigade just described. In fact, some large hotels have even larger staffs, with other positions such as separate day and night sous chefs, assistant chef, banquet chef, butcher, baker, and so on.

Most modern operations, though, are smaller than this. The size of the classical brigade may be reduced simply by combining two or more positions where the workload allows it. For example, the second cook may combine the duties of the sauce cook, fish cook, soup cook, and vegetable cook.

A typical medium-size operation may employ a chef, a second cook, a broiler cook, a pantry cook, and a few cooks' helpers.

A working chef is in charge of operations not large enough to have an executive chef. In addition to being in charge of the kitchen, the working chef also handles one of the production stations. For example, he or she may handle the sauté station, plate foods during service, and help on other stations when needed.

Small kitchens may have only a chef, one or two cooks, and perhaps one or two assistants to handle simple jobs such as washing and peeling vegetables. Cooks who prepare or finish hot à la carte items during service in a restaurant may be known as line cooks. Line cooks are said to be on the hot line, or simply on the line.

In many small operations, the **short-order cook** is the backbone of the kitchen during service time. This cook may handle the broiler, deep fryer, griddle, sandwich production, and even some sautéed items. In other words, the short-order cook's responsibility is the preparation of foods that are quickly prepared to order.

One special type of short-order cook is the **breakfast cook**. This worker is skilled at quickly and efficiently turning out egg dishes and other breakfast items to order.

By contrast, establishments such as school cafeterias may do no cooking to order at all. Stations and assignments are based on the requirements of quantity preparation rather than cooking to order.

SKILL LEVELS

The preceding discussion is necessarily general because there are so many kinds of kitchen organizations. Titles vary also. The responsibilities of the worker called the second cook, for example, are not necessarily the same in every establishment. Escoffier's standardized system has evolved in many directions.

One title that is often misunderstood and much abused is *chef*. The general public tends to refer to anyone with a white hat as a chef, and people who like to cook for guests in their homes refer to themselves as amateur chefs.

Strictly speaking, the term *chef* is reserved for one who is *in charge of a kitchen* or a part of a kitchen. The word *chef* is French for "chief" or "head." Studying this book will not make you a chef. The title must be earned by experience not only in preparing food but also in managing a staff and in planning production. New cooks who want to advance in their careers know they must always use the word *chef* with respect.

Skills required of food production personnel vary not only with the job level but also with the establishment and the kind of food prepared. The director of a hospital kitchen and the head chef in a luxury restaurant need different skills. The skills needed by a short-order cook in a coffee shop are not exactly the same as those needed by a production worker in a school cafeteria. Nevertheless, we can group skills into three general categories:

- 1. Supervisory. The head of a food-service kitchen, whether called executive chef, head chef, working chef, or dietary director, must have management and supervisory skills as well as a thorough knowledge of food production. Leadership positions require an individual who understands organizing and motivating people, planning menus and production procedures, controlling costs and managing budgets, and purchasing food supplies and equipment. Even if he or she does no cooking at all, the chef must be an experienced cook in order to schedule production, instruct workers, and control quality. Above all, the chef must be able to work well with people, even under extreme pressure.
- 2. Skilled and technical. While the chef is the head of an establishment, the cooks are the backbone. These workers carry out the actual food production. Thus, they must have knowledge of and experience in cooking techniques, at least for the dishes made in their own department. In addition, they must be able to function well with their fellow workers and to coordinate with other departments. Food production is a team activity.
- 3. Entry level. Entry-level jobs in food service usually require no particular skills or experience. Workers in these jobs are assigned such work as washing vegetables and preparing salad greens. As their knowledge and experience increase, they may be given more complex tasks and eventually become skilled cooks. Many executive chefs began their careers as pot washers who got a chance to peel potatoes when the pot sink was empty.

Beginning in an entry-level position and working one's way up with experience is the traditional method of advancing in a food-service career. Today, however, many cooks are graduates of culinary schools and programs. But even with such an education, many new graduates begin at entry-level positions. This is as it should be and certainly should not be seen as discouragement. Schools teach general cooking knowledge, while every food-service establishment requires specific skills according to its own menu and its own procedures. Experience as well as theoretical knowledge is needed to be able to adapt to real-life working situations. However, students who have studied and learned well should be able to work their way up more rapidly than beginners with no knowledge at all.

OTHER PROFESSIONAL OPPORTUNITIES

Not all those who train to be professional culinarians end up in restaurant careers. Professional cooking expertise is valuable in many callings. The following are just a few of the employment opportunities available in addition to standard cooking positions. Most of these require advanced training in other fields in addition to food production:

- Hospitality management in hotels, restaurants, large catering companies, and other organizations with a food-service compo-
- Product development and research for food manufacturers
- Product sales representatives for food and beverage distributors
- Product sales representatives for equipment companies
- Restaurant design and consulting
- Food styling for photography in books, magazines, and other publications, as well as for food packaging and marketing materials
- Food writing for newspapers, magazines, food industry journals, and other publications—not only restaurant criticism but analysis and reporting on food-related topics such as nutrition and health, agriculture, and food supply
- Training the next generation of chefs in culinary schools and in large hospitality companies with in-house training programs



KEY POINTS TO REVIEW

- What are the major stations in a classical kitchen? What are their responsibilities?
- How do the size and type of a food-service operation affect how the kitchen is organized?
- What are the three basic skill levels of modern kitchen personnel?

TERMS FOR REVIEW

Marie-Antoine Carême **Georges-Auguste Escoffier** nouvelle cuisine sustainable agriculture fusion cuisine sous vide chef executive chef chef de cuisine

sous chef station chef saucier poissonier entremetier rôtisseur grillardin garde manger pâtissier

tournant expediter aboyeur working chef line cook

short-order cook breakfast cook

QUESTIONS FOR DISCUSSION

- 1. Escoffier is sometimes called the father of modern food service. What were his most important accomplishments?
- 2. Discuss several ways in which modern technology has changed the food-service industry.
- 3. Discuss how an emphasis on high-quality ingredients beginning in the late twentieth century has influenced cooks and cooking styles.
- 4. What is fusion cuisine? Discuss how successful chefs make use of international influences.
- 5. What is the purpose of kitchen organization? Is the classical system of organization developed by Escoffier the best for all types of kitchens? Why or why not?
- 6. True or false: A cook in charge of the sauce and sauté station in a large hotel must have supervisory skills as well as cooking skills. Explain your answer.
- 7. True or false: If a culinary arts student in a professional school studies hard, works diligently, gets top grades, and shows real dedication, he or she will be qualified to be a chef upon graduation. Explain your answer.