

# Mastering the Art and Craft ZIIIO & OASULY





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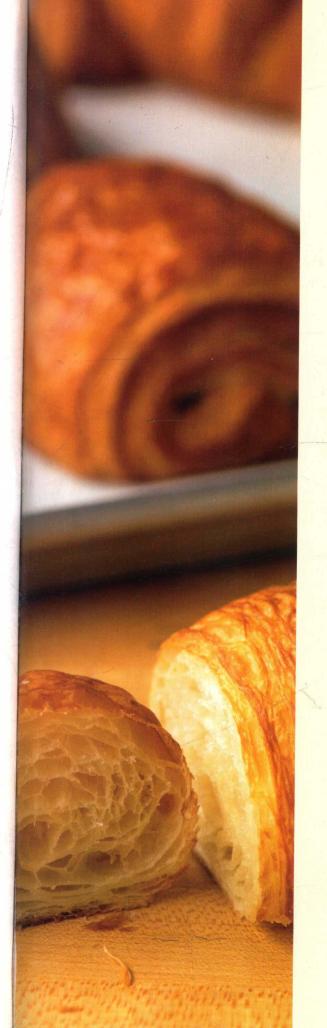
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### Preface

The audience for which *Baking and Pastry: Mastering the Art and Craft* is written includes pastry professionals and serious home bakers who want to continue their education or refer to a complete guide of baking and pastry techniques, formulas, and presentations. In addition, our students at The Culinary Institute of America will use this book as an important part of their education.

In developing the structure of this book we reflected on the structure of the education students receive at The Culinary Institute of America and used the same philosophy. The first six chapters set the stage for understanding the baking and pastry profession and using the specialized equipment and products that are common in the bakeshop. In these chapters we explain "baking science," or how different ingredients act and react to help the reader gain a deeper understanding of baking formulas specifically and in general. We introduce the fundamental methods of baking and basic calculations that are essential for any baker.

In Chapter 7 we explore the basic methods and principles for making yeast-raised breads and rolls. And in Chapter 8 we further explore yeasted breads made by more complex methods of fermentation.

In Chapters 9 through 14 the reader is exposed to the building blocks of baking, a wide range of formulas and production techniques that make up the foundation for a top-quality bakeshop. Pastry doughs and batters, quick breads and cakes, cookies, creams and custards, and glazes and sauces are the basis for many baking and pastry presentations.

Chapters 15 through 23 turn the reader's attention to assembling and finishing techniques, employing the use of the formulas set forth in the previous chapters. These chapters cover both sweet and savory baked goods, from the simple (pies and breakfast Danish) to the complex (plated desserts and wedding cakes).



Filled and assembled cakes are the focus of Chapter 16. Here, proper assembly techniques are stressed along with combining different flavors and textures. We separate the chapter into two parts, making a distinction between classic and contemporary cakes.

The later chapters draw upon lessons and formulas learned or presented earlier in the book to make more complex presentations. Formulas for making breakfast pastries (viennoiserie), individual pastries, savory baking, and plated desserts are presented in Chapters 17, 18, 19, and 20, respectively. The addition of savory baking to this edition offers the pastry chef, baker, and café owner techniques and formulas that will help develop an hors d'oeuvre menu or simply complement an already existing menu for a café or smaller operation.

The principles and techniques used for creating chocolates and confections can be complex and challenging. The fundamentals of this craft are presented in Chapter 21, which then lead readers to formulas of the kind to create dramatic confections of their own.

Chapter 22 addresses some of the principles, techniques, and materials used in décor. Piping, lettering, marzipan, gum paste, sugar, and chocolate work are just some of the techniques and materials presented. The chapter also focuses on hand tools, equipment, and proper storage and handling of the materials.

Chapter 23, the final chapter, concentrates on wedding and special-occasion cakes. This chapter is a synthesis of many of the techniques and applications presented in earlier chapters. However, we also introduce some new decorating techniques and specialized equipment and materials.

Working on this book has led us to an even richer appreciation not only for the process, but also for the art and craft of baking and pastry. We are confident the reader will not only enjoy this book, but also gain a renewed respect for the field. This book will prove to be the perfect bakeshop companion.





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#### chapter one

## Career opportunities for baking and pastry professionals

aking originated thousands of years ago and it is integral to human history and still is the source of the most basic foodstuffs. Bread's importance can be seen in the way governments regulated its production, quality, weight, and price. Bakers established the first trade guilds in Rome in 150 b.c.e.

The pastry chef, as the position exists today, evolved through the brigade system. Instituted by Escoffier, it served to streamline work with workstation and specific responsibilities. Pastries were made by the pâtissier (pastry chef). Later, this position separated from the brigade and developed its own organization largely attributed to Marie-Antoine Carême (1784–1833), a Parisian chef and pastry chef whose books on the pastry arts are influential to this day.

## Career opportunities for baking and pastry professionals

Bakers and pastry chefs can pursue many options. You might own your own company or work for someone else. It can be a commissary setting, restaurant, or shop specializing in wedding cakes or handcrafted breads. To get a foundation you may work in a cross section of bakeries and kitchens—then specialize in a discipline.

Bakers often follow one of two paths, working in large commercial bakeries that do volume production or smaller shops that produce less volume but higher-quality goods.

Wholesale bakeshops focus on large-scale production, selling finished or unbaked and items, and batters, to supermarkets, cafés, gourmet shops, restaurants, caterers, cafeterias, and the like. Individually owned shops provide a range of services, from a full-service bakeshop to one that specializes in chocolates and confections or wedding cakes. Large hotels rely upon the skills of the pastry chef and baker who are often responsible for breakfast pastries, elaborate pastry displays, wedding cakes, and the like, including the many food outlets and banquet rooms.

The restaurant pastry chef needs a range of baking and pastry skills to create a variety of items—ice cream and cakes, chocolates to serve as *mignardises* and petits fours, even pizza dough. Private clubs and executive dining rooms as well as schools, hospitals, and colleges rely upon executive pastry chefs and master bakers to handle high-volume, high-quality fare. Food producers operate research and development kitchens to test products and formulas and fine-tune them. These large businesses also offer benefits and career advancement within the corporation.

Pastry chefs and bakers often hire caterers, who meet the desires of a special client for a particular event, whether a trade convention, wedding, birthday party, cocktail reception, or gallery opening. Grocery stores hire baking and pastry professionals to develop carryout desserts and signature breads, as well as assisting with research, focus groups, packaging, pricing, and marketing strategies. Consultants in the baking and pastry arts work with clients to develop menus, staffing strategies, marketing plans, packaging, and the like.

Working in the "front of the house" as a salesperson is also an important function. Such professionals understand the needs of today's bakeries and pastry shops, promoting new ways to use familiar products and equipment. Teachers in the baking and pastry arts are vital to degree- and certificate-granting programs. Baking and pastry professionals who teach bring a special awareness of how things work in the real world. Food writers and critics have come with education and experience in the baking and pastry arts. This allows them to write truly informed reviews, articles, columns, books, and content for multimedia and online presentations.

#### Formal education

All employers look for experience and education—even entry-level positions can require a degree. The increasing emphasis on a formal education has brought about more programs dedicated exclusively to baking and pastry. Employers rely on the craft taught by these schools to establish a common ground of ability.

Both employers and schools recognize that formal education on its own is not enough to ensure excellence. Baking and pastry are practical arts. To master them, you need to work and make job choices that invest in your future.



#### Continuing education

Just as formal education has become important in launching a career, certification and continuing education keep advancing you as a baking arts professional. Because the industry is constantly evolving, continuing education, attending workshops, seminars, and trade shows hone skills while keeping up with new methods, ingredients, techniques, products, and business skills.

centerpiece

A special pulled sugar

Throughout your career, you should evaluate your achievements and goals; take the appropriate steps to keep on top of the latest information geared to both culinary professionals and the world at large. Enter contests and competitions. Educate yourself, learn to use the important tools of your business from budgets to inventory control systems.

#### Certification

The Retailer's Bakery Association (RBA) and the American Culinary Federation (ACF) have established standards for certifying bakers and pastry chefs. The RBA's certification levels begin with Certified Journey Baker (CJB). The RBA's next level includes three designations: Certified Baker (CB), Certified Decorator (CD), and Certified Bread Baker (CBB). Each level requires that your work history meet certain criteria for you to be eligible to take the exams, which have a written and practical component.

The ACF certifies pastry culinarians, giving Working Pastry Chef (WPC), entry-level certification based on a written test. Individuals working at this level are typically responsible for a shift or a section within a food-service operation. The next level is Executive Pastry Chef (CEPC), which is for department heads who report to a corporate executive or management team. Researchers and others in specialized areas also take the CEPC test. Certified Master Baker (CMB) is the highest certification given by the RBA. The ACF grants the Certified Master Pastry Chef (CMPC) certification, a ten-day exam that combines a written and practical test of classical and contemporary applications. Finally, the RBA and the ACF have specific minimum criteria that must be met before you can apply for certification.

#### Networking

Developing a professional network can be formal or informal. You begin simply by introducing yourself to others in your field. Then its having business cards at trade shows and other professional encounters. Join culinary arts organizations. Many maintain Web sites—and many culinary artists maintain blogs—that enable you to communicate with other professionals, get ideas, express ideas, and make new contacts. When you first make a good contact, follow up with an e-mail, phone call, or a note. The communication that you develop with your peers will keep your own work fresh and contemporary, and an established network will also make it much easier for you to find your next job—or your next employee.

#### The business of baking and pastry

As your career evolves, you will move into those positions where your skills as an executive, administrator, and manager are in demand. This does not mean that your ability to make breads and pastries are less important. Plating, presentation, and pricing are daily concerns for any executive pastry chef or baker—and you may still be creating new menu items and products while keeping costs under control and improving profits. Managing a bakery or pastry shop requires the ability to handle four areas effectively: physical assets, information, people (human resources), and time. The greater your management skills in these areas, the greater your potential for success. Many management systems today emphasize the use of "excellence" as a yardstick. Every area of your operation can be used to improve the quality of service you provide to your customers.

#### Managing physical assets

Physical assets are the equipment and supplies needed to do business: everything from industrial-size mixers to flour to cash registers. In short, anything that affects your ability to do business well. These require control systems that will keep your organization operating at maximum efficiency.

For any baking and pastry operation, the material costs—whatever you use to create, present, sell, and serve your goods—is the biggest expense. For this reason, being a baking and pastry professional entails being your own purchasing agent—or knowing how to work with one—to maintain inventories to produce and market your products and services.

#### Managing information

Given the sheer volume of information generated each day, the ability to tap into the information resources you need has never been more important. You must not only keep yourself informed of the latest trends, but also develop the ability to look beyond what is current to predict future trends. This will help to keep your business thriving. Restaurants, menus, dining room design, and more change dramatically with societal trends, on-the-go lifestyles, and the interest in world cuisines. Current tastes affect what people eat and where and how they want to eat it. The Internet is a powerful influence as well.

#### Managing human resources

Every shop relies on the work and dedication of people, whether they are the executive pastry chef, bakers, or wait staff to name a few. No matter how large or small your staff may be, a team effort is one of the major factors in determining whether you succeed. One of the hall-marks of the true professional is being a team member—and this team can simply be you, your clients, and suppliers. Being part of a team requires as much practice and concentration as any baking or pastry technique. The best teams are made of talented individuals who bring not only technical skills to the mix, but passion for excellence. You can immediately recognize a strong team approach in a successful bakeshop or pastry kitchen. Everyone knows what work must be done beyond just their job description.

The management of human resources entails legal responsibilities. Everyone has the right to work in an environment that is free from physical hazards and with properly maintained equipment. Liability insurance must be kept up to date and adequate. Taxes on the earnings have to be paid to federal, state, and local agencies. Employment packages have to be managed, including life insurance, medical insurance, assistance with dependent care, and even adult literacy training and substance abuse programs. In an increasingly tight labor market, benefits can make a difference in the caliber of employees you work with or manage.

#### Managing time

The days are not long enough. Learning new skills so that you can make the best possible use of time should be an ongoing part of your career. If you look at your operation carefully, you will discover how time is wasted. In most, the top five time wasters are lack of clear priorities for tasks, poor staff training, poor communication, poor organization, and inadequate or non-existent tools for accomplishing tasks. Invest time in these strategies:

**REVIEW DAILY OPERATIONS.** Until you are clear about what needs to be done and in what order, you cannot begin the process of saving time. Consider the way you, your coworkers, and your staff spend the day. Does everyone have a basic understanding of which tasks are most important? Do they know when to begin a particular task in order to finish it on time? It can be an eve-opening experience to take a hard look at where everyone's workday goes.

**TRAIN OTHERS.** If you expect someone to do a job properly, take enough time to explain the task carefully. Walk yourself and your staff through the jobs that must be done, and be sure that everyone understands how to do the work, where to find needed items, how far individual responsibility extends, and what to do in case a question—or emergency—comes up. Give your staff the yardsticks they need to evaluate their time and jobs, otherwise you may find yourself squandering precious hours picking up the slack.

**LEARN TO COMMUNICATE CLEARLY.** Whether you are training a new employee, introducing a new menu item, or ordering a piece of equipment, clear communication is essential. Be specific and be brief without leaving out necessary information.

**CREATE AN ORDERLY WORK ENVIRONMENT.** If you have to dig through five shelves to find the lid to a storage container for buttercream, you are not using your time wisely. Organize work areas carefully, so that tools, ingredients, and equipment are readily available. Schedule—and write out—like activities so they are performed at the same time and in the same way by different people.

**PURCHASE**, **REPLACE**, **AND MAINTAIN ALL TOOLS AS NECESSARY**. A well-equipped kitchen has all the tools necessary to prepare every item on the menu. If you are missing something as basic as a sieve, your *crème anglaise* will not be perfectly smooth. Learn to operate equipment safely and teach others to do the same.

#### The profession

A professional makes a living from the practice of a craft. Rather than viewing work as simply a means to an end, true professionals have a passion for their craft and a drive for excellence. Some professionals may tell you that they baked for their families or worked in a bakeshop when they were young. Others come to the baking and pastry field after establishing themselves in other areas in the food-service industry. Still others make a switch to the baking and pastry profession as a second or third career.

All professionals must learn the foundations of the profession—handling ingredients and equipment, and standard or basic formulas. At the next level, they apply those foundations, adapting and modifying formulas or finding ways to improve quality and efficiency in their own work. At the highest level, they draw on all they know and use their knowledge, skills, and creativity to produce something—as specific as a new pastry or as intangible as a successful career—that was not there before.

Every member of a profession is responsible for its image. Those who have made the greatest impression know that the cardinal virtues of the baking and pastry profession are an open and inquiring mind, an appreciation of and dedication to quality, and a sense of responsibility—cultivated throughout a career.

**COMMITMENT TO SERVICE.** The food-service industry is predicated on service, and professionals must never lose sight of that. Good service includes (but is not limited to) providing quality items that are properly and safely prepared, appropriately flavored, and attractively presented—in short, what makes the customer happy.

**RESPONSIBILITY.** A professional's responsibility is fourfold: to him- or herself, to coworkers, to the business, and to the customer. Waste, disregard for others, misuse of any commodity are unacceptable. Abusive language and profanity, harassment, insensitivity to gender, sexuality, and race do not have a place in the professional bakeshop and pastry kitchen. Self-esteem and attitude toward the establishment need to be positive.

**GOOD JUDGMENT.** Although not easy to learn, good judgment is a prerequisite for a professional. Good judgment is never completely mastered; rather, it is a goal toward which one can continually strive.