



what's RISING

exploring chocolate mousse



Brian Wood
Baking & Pastry Instructor

Chocolate mousse should be a rich, intoxicating rush of chocolate with smooth flavors and a creamy mouth feel. There are numerous preparations and formulas for chocolate mousse, from a simple combination of crème Chantilly and ganache to a formulation of several elements such as ganache, various egg foams (*pate a bombe*, Italian meringue, Swiss meringue, and common meringue) and whipped cream. From the three major categories of chocolate—white, milk and dark—there are numerous options for composition and flavor development.

Because there are several key variables concerning cocoa content alone, the pastry chef must be knowledgeable about the working properties of chocolate in order to have consistent results.

“Chocolate is a perfect food,
as wholesome as it is
delicious, a beneficent
restorer of exhausted
power.”

Baron Justus von Liebig,
German chemist
(1803-1873)



This article is a continuation of an article on fruit mousse in SFBI's Summer 2005 newsletter. In that issue we learned about fruit mousse and considerations such as the selection of fruit, the importance of balancing the flavors of the fruit with particular egg foams, and altering the ratio of whipped cream to the base flavoring element. For a review of the fruit mousse article, which introduced in greater depth many of the components referred to in this article, you may find an archived copy at sfbi.com.

Whatever preparation is chosen, the formulas and processes are all bound by some common practices and techniques.

Essential Guidelines for Chocolate Mousse

In order to make a successful chocolate mousse, there are specific guidelines that should be met in the following areas:

- Ingredients and Formulation
- Temperature
- Emulsion
- Handling and Sanitation

The following section will explore these factors.

Ingredients and Formulation

The quality of ingredients used in a chocolate mousse will be evident in its final structure and flavor. In particular, the percentage of cocoa butter and cocoa content in chocolate provide essential functions in the mousse, including setting properties, workability and mouth feel. If a couverture-grade chocolate is not used, for example, the chocolate may not be supple enough, and other hard fats in the preparation may interfere with the make-up process and have a negative effect on mouth feel and flavor.

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exploring chocolate mousse ... scheduling your day in the bakery ... 2006 class schedule ... baker's tip ... recipe of the season ... and more!

the clipboard trend is hot!



Michel Suas
Founder

Do you know these abbreviations: FS, HACCP, RKS, GMP, MSDS, CCP? Well, if you don't, you are lucky. A few years ago, most of the phone calls

and emails SFBI received asking for advice had to do with baking. The trend for most conversations included formula procedures, what to do with flours, the famous protein content question, and achieving quality without forgetting the ash content. These days, many conversations are about these abbreviations—the focus is less on the quality of baking or new ideas for bread and pastry.

The artisan bakery industry is changing in many ways. Even the baker's appearance is different: in the past, bakers might wear caps and scarves with different colors and shapes. (Even sushi headbands were used in one bakery we know of.) Now, every one gets the “privilege” of wearing a white hairnet (and even a beard net, if you happen to have facial hair.)

HACCP (Hazard Analysis Critical Control Point) was originally set up by Pillsbury and NASA for the food going to space because exchange or return, I suppose, was difficult for astronauts. The big food industry now applies these same principles, maybe in the hopes of shipping products to the moon (because Wal Mart is planning to open a store there.) Now the big buyers

Many conversations are about these abbreviations—the focus is less on the quality of baking or new ideas for bread and pastry ...

You might have figured it out—I am talking about sanitation rules and the departments associated with them.

require the entire baking industry to adhere to these same systems in order to be qualified to sell to them.

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about sfbi

Since 1996, the San Francisco Baking Institute (SFBI) has trained hundreds

of professional and aspiring bakers from all over the world. We have acted as the unofficial training site for several award-winning Baking USA Teams and hosted a variety of international groups—from countries including Russia, China and Japan—interested in bringing artisan baking back to their homelands.

SFBI is recognized within the baking industry as a place where artisan baking is respected, appreciated and celebrated. We are passionate about sharing our knowledge and enthusiasm with students and clients in an effort to raise the level of the craft.



exploring chocolate mousse, cont.

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In addition to the texture of the final product, the percentage of cocoa will affect the quantity of chocolate and additional sweet elements such as *pate a bombe* and Italian meringue.

One of the most successful ways to make a chocolate mousse is to create an emulsion between the chocolate and a portion of the cream in the formula. Melting and emulsifying the hard crystalline fats of the chocolate with the fat and water content from the cream enables easy incorporation of the remaining components and is the building block for the resulting creamy and smooth characteristics. The ganache may be made with milk, pastry cream, cream or *crème Anglaise*. Each of these contains a different amount of fat, as well as differing quantities of free water, and this will affect the texture of the ganache. As for the egg foam component, *pate a bombe* adds a rich flavor as well as helps in maintaining a smooth emulsion. For these reasons, it is commonly used in chocolate mousse. Italian meringue may also be used; and, due to its lighter nature, it will provide more lightening capacity than the *pate a bombe*. Some mousse may be made without an egg foam.

Almost all chocolate mousse calls for whipped cream with a 35-40 percent fat content. The quantity of whipped cream added will thin the network of cocoa butter setting properties, yet the developed cream should have enough strength from the developed fats to hold its own weight. As with fruit mousse, once the soft-peak whipped cream is incorporated, the temperature will drop and the final process of depositing the mousse should begin.

Depending on the type and quantity of chocolate used for a mousse, additional



Strain the crème anglaise through a chinois onto the melted chocolate to make a ganache.



Form an emulsion starting in the center and working out from the middle.



Whip the cream to soft peaks.



Fold in 1/2 of the whipped cream once ganache is proper temperature.

setting agents may be required. A dark chocolate mousse should be able to set on its own, while white and milk chocolate mousse cakes generally require the addition of gelatin to ensure proper setting and texture. The quantity of gelatin will vary according to what type of chocolate was used and by the ratio of chocolate to other ingredients in the mousse.

In general, the lower the cocoa content, the higher the amount of alternative setting agents that will be needed for the final product.

Cocoa Percent and Sugar in Chocolate Mousse Formulas

It is important to consider the percentage of cocoa and the type of chocolate (which varies considerably by brand), when determining the quantity required for a mousse. The higher the cocoa percentage, the less chocolate will be required to substantiate a full chocolate flavor and set a specific amount of the mousse. Particular attention must be paid to the amount of chocolate used, as the cocoa butter in it is the major setting agent for chocolate mousse cake. As a rule, cocoa butter makes up at least 50 percent of the cocoa content in couverture grade chocolates.

Balancing the cocoa and sugar content of the chocolate with the other fats and sugars in the mousse is essential to maintaining a smooth emulsion, proper mouth feel and taste. Cocoa content acts as a stabilizer and setting agent, and if the formula does not contain enough *pate a bombe* or whipped cream in relation to the chocolate, the mousse will be very firm. Conversely, too little cocoa content may not provide enough flavor or setting properties.

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Temperature

Temperature control is as essential to a great mousse as the selection of high quality ingredients. Because of the unique crystallization properties of the cocoa butter and its behavior over different temperature ranges, it is necessary to have a solid understanding of temperature guidelines before mousse preparation begins.

Chocolate needs to reach 110–120° F for the fat crystals to melt completely. When ganache is used as the base for a mousse, it is advisable to bring its temperature between 100–110° F to ensure that all cocoa butter is melted and that production is not rushed. Once the ganache has cooled to 95–100° F, the egg foam may be folded in and the whipped cream added.

Mousse should always be deposited before it cools to the point of cocoa butter crystallization, which occurs between 80–84° F. If the cocoa butter crystallizes before the mousse is deposited in the mold, it becomes difficult to portion, and quality is compromised. The mousse should set up in the mold, not the bowl.

One final note: in cooler months, mousse can be prepared successfully at warmer temperatures. During warmer weather, preparation can take place at slightly cooler temperatures.

Emulsions

A key step in producing a palatable mousse is to create a stable emulsion, or blend of water, fat and air. Considering the high fat and water content in a mousse, proper formulation, temperature control and rate of incorporation must be observed. If not, the end product will have a sticky, greasy mouth feel, a dense consistency and will not cut cleanly.



Deposit, using a ladle, over the bretton crust.



Remove the rhubarb insert from the freezer and press into the mousse.



After depositing more mousse, add the strawberry gelle layer.



Fill the mold to the top—cover and freeze.

Handling

In order for the mousse to maintain proper volume, overworking must be avoided. A properly made mousse should be ladled into larger molds, and piped into smaller ones. It should be noted that applying mousse with a spatula or piping bag may decrease the volume by 15–20 percent, which in turn may lead to increased costs for labor and ingredients, since more weight is needed to create the same volume. Additionally, the light textures are lost, and the mouth feel becomes dense and sticky.

Sanitation

Because mousse is a ready-to-eat food, proper sanitation must be practiced to avoid contamination from microorganisms. All equipment must be clean and sanitized. Base ingredients as well as the finished product should remain refrigerated or frozen as necessary to avoid spoilage of ingredients.

Process: Chocolate Mousse

The general process for chocolate mousse is to begin by whipping the cream to soft peaks and reserving it in the refrigerator. The next step is to make the base. Depending on the formulation, this may be based on a crème Anglaise, or on pastry cream and chocolate. If gelatin is used in the formula, it may be added to the warm ganache after blooming and melting. Next, the egg foam should be started.

Once the egg foam has cooled to 95–100° F, and the ganache/base is the same temperature, the egg foam may be added to the ganache. It should be mixed in only to incorporation to avoid breaking the emulsion. Next, the soft-peak whipped cream may be added. Once all of the cream is incorporated, the mousse should be deposited and frozen.

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Variations on chocolate mousse may include the addition of nut pastes, cocoa nibs, cubed Gelée or alcohol. Denser items such as nut pastes should be added to the ganache, whereas lighter ingredients and inclusions may be added after the whipped cream has been folded in. Caution must be taken to avoid over-mixing the mousse during the addition of alcohol

The possibilities for flavor and presentation of chocolate mousse are quite vast ...

or other inclusions. The more the mousse is stirred, the more the fat develops and the grainier the texture becomes.

General Process for Chocolate Mousse

- Scale all ingredients and prepare all molds.
- Whip the cream to soft peaks and reserve in the refrigerator.
- Prepare the base ganache.
- Prepare the egg foam.

- Once the base is 95–100° F, fold in the egg foam (if applicable).
- Finish whipping the cream to soft peaks and fold into the base.
- Gently fold in any inclusions (if applicable).
- Deposit into molds and freeze.

Chocolate Mousse: Much to Consider

The possibilities for flavor and presentation of chocolate mousse are quite vast. Careful selection of chocolate can produce a tremendous array of results, while using different egg foams, add-in ingredients and whipped cream will allow any chocolate to be transformed into virtually any mousse. By attaining a better understanding of the process and technical points of chocolate mousse, the pastry chef should now be ready to make some cakes!



the clipboard trend, cont.

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One of the repercussions of this new atmosphere in the baking industry is that you need to record *everything*. The problem, as we have all learned, is that it takes a lot of time and paperwork to accomplish this. Making it even more difficult, all the different agencies do not consolidate their requirements into one manual, thus creating a lot of redundancies. It is almost like our current homeland security system, including the FBI and the CIA (more abbreviations to remember) when the left hand does not know what the right hand is doing.

Obviously, I am not against sanitation, quite the contrary, but we should voice

our concerns and request that all the relevant agencies make one consolidated manual that we can reference.

A few months ago I was talking to the owner of a very old bakery created by his great grandfather, and passed from generation to generation. I asked him why the quality of the bread deteriorated from the time his great grandfather opened the bakery. He replied that the biggest challenge for the family began when the Health Department started to inundate the bakery with requirements. The unions also made a big impact, changing the working shift length and requiring a full closing one day a week. The bakery

started to use dough with conditioner to meet shift requirements, chemicals to extend shelf life, and you know the rest.

Are we going back where we came from? We should make sure we are producing food to extend the life of our customers, not the product, with chemicals and a sanitized bakery. The “cutting edge” for our customers is not a certification from any organization, but the final product with day-in, day-out consistency and innovation. That’s what put artisan bread and pastry on the map. Let’s not wipe it out with paper towels and chlorine!

—Michel Suas

STYL 2006

Artisan I: Baking Fundamentals	Artisan II: Mastering Sourdough	Advanced Artisan Breads
<p>2006 Schedule: January 9 - January 13 February 6 - February 10 March 6 - March 10 May 15 - May 19 July 17 - July 21 August 14 - August 18 October 30 - November 3 December 4 - December 8</p>	<p>2006 Schedule: January 16 - January 20 February 13 - February 17 March 13 - March 17 May 22 - May 26 July 24 - July 28 August 21 - August 25 November 6 - November 10 December 11 - December 15</p>	<p>2006 Schedule: September 18 - September 22</p> <p><i>with Guest Instructor, Didier Rosada</i></p>
<p>As a student in Artisan I, you will become familiar with the terms short mix, improved mix and intensive mix while learning what types of flour you should be using and the proper mixing techniques for every bread imaginable. You will gain an understanding of the relationship between mixing and fermentation; learn how you can completely change the profile of bread by adding an additional ingredient; acquire overall knowledge about the most common preferments used in bakeries today and much more. We use the classic Baguette to teach the fundamentals, but you will also learn to make Rye Bread, Whole Wheat Bread, Multigrain Bread, Pan Bread and Braided Egg Bread. The skills you learn in this class are directly applicable for a position in a professional bakery or for a serious home baker. This class, limited to 15 to allow for personal instruction, fills up quickly, so reserve your spot early. Be sure to consider the dates for our Artisan II workshop, scheduled to allow you two consecutive weeks of intensive training.</p>	<p>Building on the skills you gained in Artisan I, Artisan II takes you full speed ahead into the world of sourdough bread. To become a truly skilled baker, you must learn how to control sourdough and not let the sourdough control you! Unravel the complex world of wild yeast and bacteria as you learn how to start your own sourdough starter, adjust the feeding schedule to maximize the quality of the bread and take your own version of the starter home. Experiment with different styles of starters and fermentation to achieve the flavors and characteristics you desire. The extensive hands-on portion of this class includes Sourdough Breads made with liquid and stiff starters, Olive Bread, Raisin Bread, Ciabatta with a poolish and many other favorites. On the last day, you will mix a batch of sourdough by hand using the starter you created on the first day of class. If you are serious about becoming a better baker, this is a class that you do not want to miss! We encourage you to take Artisan I before enrolling in Artisan II unless you already have a thorough understanding of baking fundamentals. Artisan I and Artisan II sell out quickly, so please be sure to register early!</p>	<p>Advanced Artisan Breads is designed for experienced bakers interested in refining their skills and deepening their overall knowledge to become even better at their craft. During this illuminating workshop for those who love their profession, you will learn about and practice a variety of interesting breads using advanced methods. You will experiment with ways to fit new breads into an existing product line with fresh techniques such as sourdough to make sweet breads and miche using high ash flour and 230% (!) starter. Whole grain breads will be produced using whole grain starters and no white flour. You will work with difficult flours such as rye and spelt. Retarding techniques will be demonstrated with Baguettes and Ciabatta - retarded before shaping, and Whole Wheat - retarded after shaping. Because this more advanced class is not designed for beginning bakers, students need to have taken Artisan I and Artisan II or have extensive experience and a thorough understanding of the baking process, including science and terminology. Experienced bakers will be inspired by the newfound understanding and marketable skills they take away from this seminar!</p>

NEW IN 2006—COMPREHENSIVE PASTRY WORKSHOP SERIES

Pastry I: Cake Bases, Creams and Assembly	Pastry II: Exploring Creams, Mousses and Glazes	Pastry III: Advanced Cakes and Pastries
<p>2006 Schedule: March 13 - March 17 June 19 - June 23</p>	<p>2006 Schedule: March 20 - March 24 June 26 - June 30</p>	<p>2006 Schedule: March 27 - March 31 July 3 - July 7</p>
<p>In this introductory class, students will learn the formulas, techniques and processes that are the foundation on which both modern and classic desserts are built. Through lecture, demonstration and hands-on participation, you will learn about ingredient functionality, cake mixing methods, pastry doughs and batters, creams and icing preparation, and layer cake assembly. Students will make a variety of base products such as Angel Food cake, Chiffon cake, Genoise, Devil's Food cake, Japonais and Pâté à Choux. The cake and pastry bases will then be finished with a variety of creams and icings such as pastry cream, fruit curd, Italian butter cream and fondant. Special emphasis will be placed on learning the procedures for making cake and pastry bases, proper creams and icing preparation and assembling and icing layer cakes. Some of the finished products will include Chocolate Hazelnut Cake, Lemon Curd Cake, Black Forest Cake, Napoleon Cake, Éclairs and Paris-Brest.</p>	<p>In Pastry II students will explore in-depth the techniques and processes that make up the desserts and pastries which are found in many of today's pastry shops. Cake mixing will continue with sponge cakes including Roulade (Jelly Roll) and Almond Sponge Cake. These versatile cakes will be used to finish several of the desserts using Crème Anglaise, Pastry Cream, Diplomat Cream, Bavarian Cream, Mousseline Cream and Crèmeux. In addition, students will also learn the fundamental principles for creating light fruit mousse cakes and rich chocolate mousse cakes. Several mediums for finishing cakes such as Italian butter cream, various chocolate glazes, ganache, fruit glazes, mirror glazes and marzipan will also be implemented. Some of the final products produced in Pastry II include Opera Cake, Baba Savarin, Crèmeux Tarts, Bavarian Cakes, Fraisier Cake, Charlotte Russe, as well as Fruit and Chocolate Mousse Cakes.</p>	<p>This class is designed for professionals in the industry or students who have completed Pastry I and Pastry II and are interested in learning more about product composition, advanced mousse preparation, chocolate and advanced finishing techniques. Students will learn how to add flavor and flair to their products by creating infused creams, frozen inserts, textured cake bases and seasonal fruit preparations that can complement the natural flavors and textures of any dessert. Expanding on the formulas and processes learned in Pastry I and Pastry II, students will produce dessert offerings that reflect today's pastry trends. Special emphasis will be placed on understanding the balance between flavor, texture and visual elements to create eye catching and flavorful desserts. Through demonstration and hands-on participation, students will learn how to temper and work with chocolate in order to create sophisticated garnishes to highlight any pastry or dessert.</p>

COURSES

Fundamentals of Pastry	German Breads	Holiday Pastries
<p>2006 Schedule: February 27 - March 3 October 16 - October 20</p>	<p>2006 Schedule: March 20 - March 24 November 13 - November 17 <i>with Guest Instructor, Thorsten Phillipe</i></p>	<p>2006 Schedule: October 30 - November 3</p>
<p>Learn the fundamental formulas and processes for creating today's most popular and appealing pastries as we cover the mixing and baking of a number of products—from quick breads, to cookies, to puff pastry. Students will learn to make Financiers, Madelines, Muffins, Pound Cake, an assortment of Cookies, Brownies, Pies, Coffee Cakes and more. Savory items will also be explored as a way to build a diverse product line by using a few base pastry formulas such as pate a choux and puff pastry. The main focal points of this class are the understanding of ingredient functions and the mixing, handling and baking guidelines for the pastry doughs and batters covered. Students will obtain the knowledge and skill necessary to produce, manipulate and troubleshoot a wide variety of baked goods.</p>	<p>This exciting seminar dedicated to whole grain and German breads will show you how easy it can be to add these unique products to an existing bread line. If you have worked with doughs containing a high percentage of rye or whole grains, you know how difficult they can be to handle. Learn how to adjust your mixing times and fermentation to get exceptional results, even when using 100% rye! You will make traditional breads including Sourdough Rye, Whole Grain Spelt Bread, and the traditional Pumpernickel, which bakes for 36 hours! You will also learn how to make traditional Bavarian Pretzels and Kaiser Rolls.</p>	<p>Holidays are steeped in tradition and associated with warm memories. The pastries and desserts we identify with are modern day reminders of a forgotten art. In this class, you will finally learn the time honored secrets and techniques for producing an array of holiday breads, cookies, cakes and tarts that are rich in culture, tradition and flavor. A wide variety of specialty items will be covered, including Stollen, Pannetone, Buche de Noel, Holiday Mousse Cakes and seasonal cookies, pies and tarts. Through lecture, demonstration and hands-on participation, student will learn the formulas and processes for a wide variety of items. Discover why these beautiful desserts and pastries are holiday favorites and introduce your customers or family to a wealth of traditional and exciting flavors.</p>

VISIT www.sfbi.com FOR SCHEDULE UPDATES AND MORE DETAILED CLASS DESCRIPTIONS!

Viennoiserie (Breakfast Pastry)	Whole Grain Breads and Specialty Flours	Baking with a Wood Fired Oven (Four a Bois)
<p>2006 Schedule: February 20 - February 24 April 24 - April 28 October 23 - October 27 December 11 - December 15</p>	<p>2006 Schedule August 7 - August 11 <i>with Guest Instructor, Didier Rosada</i></p>	<p>2006 Schedule July 31 - August 4</p>
<p>Viennoiserie is the term used to describe sweet yeasted dough—laminated or non-laminated. The interest in laminated dough such as Croissant, Danish and Brioche is rising considerably and the quality of Viennoiserie in America is finally starting to catch up to the quality of well-crafted artisan breads. Through lecture, demonstration and hands-on production, students will learn about ingredient functions, dough mixing technology, laminating technology, the preparation of fillings and make-up and baking processes. Students will learn to add visual appeal to their pastries using glazes, fresh fruits, nuts and highlights of powdered sugar. Serious bakers and pastry enthusiasts alike will gain knowledge about various fermentation techniques as a way to accommodate production, build flavor and add shelf-life. A selection of non-laminated dough will include items such as Pan d' Oro, Pannetone, Stollen and Brioche.</p>	<p>During this intensive, hands-on workshop, students will learn how to bake with whole grains and specialty flours. Technical characteristics of specialty flours such as buckwheat, spelt, and semolina will be covered, along with precautions to take when using them. A variety of breads will be baked each day, including Flax Seed Bread and Pear-Buckwheat Bread. Students will learn how to consistently work with whole grain breads in a bakery environment to satisfy the growing customer demand for these products. The class will discover whole grain yeasted preferments and how to work with sprouted wheat. In addition, each student will build a sourdough culture using whole grain flours to be used in final dough by the end of the week. Beginners and experienced bakers alike will be inspired as they learn an array of new breads and different shapes.</p>	<p>Don't miss this rare chance to experience baking the way it was done in days past! You will learn about the large selection of products that are well-suited to being baked in a wood fired oven, including breads and sweet and savory items such as pizza and rustic tarts. Instruction will also include the fundamentals of designing and building a wood-fired oven. Most of this class will be hands-on, but some products will be demonstration only. Please note: Due to the size limitations of the wood fired oven, a sampling of each product will be baked in the wood-fired oven; the remainder will be baked in the gas fired deck oven. NOTE: Due to the size limitations of the wood fired oven, only a sampling of each product will be baked in this oven; the remainder will be baked in the gas fired deck oven.</p>

how to register

- Register on line at www.sfbi.com or call 650.589.5784 to register over the phone.
- Tuition for all classes is \$980; tuition includes daily lunch. Sign up for 2 classes within a 12 month period and receive a 10% discount on the second class: total price is \$1,862.
- A 50% deposit is required to reserve your space in class payable by check, cash or credit card (MasterCard, VISA, American Express). The remaining amount is due on the first day of class.

quick class facts

- All courses run from Monday-Friday.
- Courses begin at 8:30am on Monday and 8:00am for the rest of the week. Classes end at approximately 4:00pm each day.
- Acceptable attire is a white chef's coat or white shirt and checked pants. Hat optional. Wear comfortable non-skid shoes.
- Bring a notebook, writing utensils and a calculator to class.
- As a courtesy to our instructors and fellow students, mobile phones must be shut off or left on "vibrate" mode during class.
- SFBI offers special rates at select hotels near our campus. Most of these hotels offer direct shuttle service to and from our school. Visit www.sfbi.com or call us at 650.589.5784 for details.

how to schedule your day

BY TIM KITZMAN, SFBI INSTRUCTOR

Most small bakeries have a tendency to rely on long hours and depend on only a few employees. Every baker has a system that works for the bakery, but how does that system work for the baker? With a well-planned system a small bakery can produce hundreds of loaves of multiple varieties within a normal work day. The baker just needs to utilize his talent, skill and knowledge of various processes. If the baker can assess products, time for delivery or display, staff, refrigeration, and space, then he can likely arrange a schedule that will allow for a normal 8-10 hour shift with high quality product being produced on time.

I would like to introduce a few important considerations for creating a new schedule for a small bakery that allows for a seamless flow of activity with minimal waste of time, space and equipment. The bakery will need a few key pieces of equipment: a deck oven that has a timer set to turn the oven on a few hours before the bakers arrive; a proofer/retarder or walk-in refrigeration, and a convection oven. With this equipment, a schedule can allow for a flurry of activity in the first few hours with mixing, shaping and baking all occurring at the onset of the day.

Virtually all bakeries begin their day with a mixer arriving hours before the rest of the staff, preparing the doughs that everyone will shape and bake. This task is perhaps the most important aspect of the day, but often taken for granted. We all consider every aspect of the day to be important, but the mixer tends to mold how the entire day will flow, with properly mixed doughs containing the proper hydration and

dough temperatures. What we are trying to achieve is a shorter period of time between the arrival of the mixer and the shapers and the beginning of the day's bake. This will be done with the use of retarded doughs, pre-fermented doughs and a proper mixing sequence.

Imagine a schedule that would have a mixer arrive at work one hour before the rest of the staff, having doughs ready to divide when the others arrive. This will become a major step towards compressing your time. In that short period of time several mixes are completed and the first fermentation nearly complete for the first dough that was mixed. By adding pre-ferments to the doughs the baker will greatly improve the flavor of the breads with the added bonus of a relatively normal first fermentation time. For example, baguettes made with a poolish will bulk ferment for close to an hour—that will become the hour difference between when the mixer arrives and the when the rest of the bakers arrive. If the mixer's timing is proper the shapers will arrive and have no hesitation period.

Throughout the course of the morning, the mixer has prepared the doughs for the rest of the staff. The style and sequence of the doughs being mixed have been given much thought as to the time of bulk fermentation, whether

the doughs are baked within the day or retarded. This is a very important aspect of the mixing sequence. If the first dough mixed is given roughly an hour bulk fermentation then this will allow for the shapers to begin immediately when they arrive to work. If you continue on a similar pattern with the bulk time being an hour or so then you may begin to run into some problems.

Consider that it takes generally 10-15 minutes to mix and pull a dough, but it may take more than that to divide and shape that amount of dough. So the progression of the day also relates to the length of fermentation for the doughs being mixed. Some doughs are an hour, some closer to two hours and many two to three hours. After that initial onslaught of ready to shape batches of dough, the mixer should begin to mix doughs such as the sourdoughs which will take at least 2-3 hours to bulk ferment, then back to the shorter fermentation doughs. Jogging the mix sequence with the bulk time allows the bakery to maintain a flow of events without any lag time and without compromising the dividing and shaping.

When the rest of the staff arrives they will immediately divide doughs, and begin to bake the retarded and fully proofed doughs that were prepared the day before.

The ability to begin baking a well fermented dough with complex flavor profiles at the onset of the day is the true blessing of retarded doughs. When choosing to retard at least a portion of your bread you will be well positioned to compress your day into a seamless succession of events.



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professional training program

If you are committed to starting a new career as a baker or pastry chef, or enhancing your current career in the baking industry, our Bread & Pastry Professional Training Program will give you the foundation you need to achieve success. Our highly concentrated, focused curriculum includes an unusually high level of hands-on practice and deliberately small class sizes. In our spacious facility, just a short drive from downtown San Francisco, we offer a technologically advanced, welcoming environment where we introduce students to artisan baking and pastry at its best. Visit us online at www.sfbf.com for a detailed curriculum and more information, or call us at 650.589.5784 and ask for an application package to be mailed or emailed to you.

what

Bread & Pastry Professional Training Program

when

The current session runs from June 5 to October 6. Check sfbf.com for the next scheduled session.

where

Train at SFBI's facility, just a few minutes from the one of the most beautiful cities in the world. Learn in a production-sized environment, with small class sizes, spacious bakery classrooms and technologically advanced equipment.

Changing careers or want to jump-start your baking career? Earn your diploma from our Bread & Pastry Professional Training Program and realize your dreams!

why

The only school in the United States dedicated exclusively to artisan baking, SFBI offers you the unique opportunity to train in an environment where baking never takes a backseat to other culinary learning.

how

Apply online at www.sfbf.com or call us for more information at 650.589.5784.

TRAIN FOR TWO WEEKS AT L'ECOLE FERRANDI

join us for a baking adventure in Paris!

SPECIAL TRAINING THIS YEAR - LEARN PIERRE HERME TECHNIQUES FOR MACAROONS AND ICE CREAM/SORBET

We invite you to join SFBI for two weeks of bread and pastry training at L'Ecole Ferrandi in Paris, France. Every year the San Francisco Baking Institute brings students participating in our Bread & Pastry Professional Training program to train for two weeks in France. This portion of our professional training program is now available to non-participants. Anyone who has a passion for baking will deeply appreciate this one-of-a-kind trip! Because of the level of training at L' Ecole Ferrandi, students should have completed some training at SFBI, or have other baking experience—courses are not designed for the beginning baker. Don't miss this unique opportunity—reserve early! All classes are taught in English.

Trip Details

- October 8: Arrive in Paris
- October 9-20: Professional Baking & Pastry Arts Training at L' Ecole Ferrandi in Paris
- October 21: Depart from Paris
- Package Price: \$2,545 (excluding airfare and hotel)

Package includes:

A once in a lifetime experience—the chance to enrich your culinary knowledge with two weeks of professional baking and pastry arts training at L' Ecole Ferrandi in Paris, France. Special section this year focuses on Pierre Herme techniques for macaroons and ice cream/sorbet.

PACKAGE PRICE DOES NOT INCLUDE AIRFARE OR HOTEL.

Register early—space is limited!

For more information, please contact Evelyne Suas at 650.589.5784 or evelyne@sfbf.com



how to schedule your day, cont.

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What is beginning to develop is that the bakery has multiple doughs that have been and are being mixed, shaping is beginning, and the first load of baking has begun. All of this has happened minutes after the shapers/bakers have arrived, and at most an hour after the mixer arrived. So if the mixer arrived at three a.m. and the shapers arrived at four a.m., by five a.m. you have loaves baked, loaves being shaped and most of the mixing being finished. Doesn't that sound like a favorable amount of production within two hours?

When the sequence of shaping coincides with the time that a dough is ready to divide then a continuous flow of shaping happens. The challenge is knowing how long it takes to divide and shape a batch of dough as well as the time that a dough is ready to divide. This consideration is somewhat relative to your staff's speed and efficiency, as well as the batch size. If the day began by dividing a pre-fermented baguette dough, then another dough with a bulk time of an hour or so, the mixer will now begin to mix the longer fermentation doughs, perhaps the sourdoughs. Given the time it takes to divide and shape a batch of dough the first few doughs out of the mixer will be taken on in a quick-paced morning. Afterwards the shapers will carry on with the shorter fermentation doughs such as the pan breads and rolls. By the time they are shaped and proofing, it is time to divide and shape the sourdoughs, or other doughs you plan to retard.

Whenever you are considering a new schedule, think about your staff. They are the key ingredient to a successful day. All employees should be cross-trained in all aspects of the day. Cross-training will alleviate the problem of

Sample Schedule

3 am

- the mixer arrives
- mixes: Baguette with poolish; Semolina with poolish; Ciabatta with poolish; Pan breads with rolls/with paté fermente

4 am

- the shapers/bakers arrive: begin loading oven with retarded proofed doughs from day before, also begin to divide baguettes
- mixing: 1st sourdough-4:15; 2nd sourdough 4:30; 3rd sourdough-4:45
- begin dividing semolina

5 am

- divide and tray up rolls and pan breads
- retarded doughs pulled from the oven
- baguettes shaped and in the proof box
- semolina is shaped

6 am

- baguettes are being loaded
- pan breads/rolls loaded in convection oven
- semolina is near full proof
- divide ciabatta

7 am

- divide 1st sourdough to be retarded
- divide 2nd sourdough to be retarded
- divide 3rd sourdough to be retarded
- load ciabatta

8 am

- all doughs for retarding have been shaped and are in the proofer/retarder
- ciabatta is being pulled out of the oven
- packing begins with the cool bread

9 am

- prescale all doughs for the next day
- continue culture elaboration (feeding the sour), mix pate fermente
- finish packing breads for delivery or display

10 am

- finish the pre-scale
- mix poolish for next day
- place pate fermente in walk-in
- clean up

relying on one aspect of the day to be the burden of just one employee. Most of us can recall many days where negative energy coming from one unhappy employee puts stress on all staff and on the bread. This affects the timing of the day, and the quality of the mixing, shaping and the baking. So if the goal is to make a continuous, harmonious flow of events ... cross-train your employees.

Whenever you are considering a new schedule, think about your staff. They are the key ingredient to a successful day.

The goal of any work schedule is to maximize productivity, minimize lag time, and provide a flow of activity that has all of your equipment and personnel working fluidly with confidence and precision. To do so the baker must assess his or her oven capacity in relation to bake time as well as customers needs. In other words, how much do I need to produce to satisfy customers and how much can I actually produce? So, in this respect, the baker needs to fully understand what his equipment (oven space, rack space, number of banneton, couche, proofing boards, retarding space) can do for the bakery. Another consideration is how much can your staff produce, the number of people in relation to speed, efficiency, accuracy as well as equipment. These are many of the considerations to take into account when trying to fully utilize the ability of the bakery as well as the abilities of the bakers.

recipe of the season: summer mousse

Yield: 2- 8" Cakes

Components

Pate Sable Breton; Rhubarb Compote; Strawberry Jelly; White Chocolate Custard Mousse; White Chocolate Spray; Fresh Berry Décor

Pate Sable Breton

Ingredients	Lbs and Oz	Metric	%
Butter	8 oz	0.220	91
Powdered Sugar	2.6 oz	0.075	29
Fleur de Sel de Geurande	1/8 tsp	0.002	.8
Egg Yolk, cooked	½ of 1 large yolk	0.010	3.3
Pastry Flour	8.7 oz	0.245	100
Total	19.6 oz	0.552	224.1

Process

- Cook the egg yolks and press through a fine strainer.
- Soften the butter and mix all of the ingredients together with the dough hook.
- Reserve in the refrigerator for at least 4 hours.
- Sheet down to 7mm. and cut out circles 7 inches in diameter and return to refrigerator for 30 minutes.
- Bake at 335° F for about 20 minutes or until golden brown.

Rhubarb Compote

Ingredients	Lbs and oz	Metric	%
Rhubarb	15.3 oz	0.430	100
Sugar	1.6 oz	0.045	10.5
Lemon Juice	.75 oz	0.020	4.5
Sugar	.75 oz	0.020	4.5
Gelatin	3 sheets	3 sheets	1.4
Total	18.4 oz	0.515	121

Process

- Clean the rhubarb and cut it into slices ½ an inch wide. Toss in the first sugar, cover with plastic and reserve for at least 12 hours.
- Before cooking the final preparation, bloom the gelatin.
- Combine the rhubarb with the lemon juice and second sugar and bring it to a simmer for about five minutes until the rhubarb is just tender.
- Drain the gelatin, add it to the hot compote and deposit into a 6.5" diameter flexipan (0.250 kg each) and freeze.

Strawberry Jelly

Ingredients	Lbs and Oz	Metric	%
Strawberry Puree	9.25 oz	0.260	100
Sugar	2.15 oz	0.060	23
Gelatin	4 sheets	4 sheets	3
Balsamic Vinegar	1 tsp.	0.010	3.8
Total	11.75 oz	0.330	129.8

Process

- Bloom the gelatin and warm the puree and the sugar to 120°F.
- Melt the gelatin and temper it into the puree.
- Add the balsamic vinegar and then emulsify and deposit into 6.5" diameter Flexipans (0.160 kg each) and freeze.

Custard Cream for White Chocolate Mousse

Ingredients	Lbs & Oz	Metric	%
Milk	1 lbs 2 oz	0.500	100.00
Vanilla Bean	1	1	~
Egg Yolk	3.5 oz	0.100	20.00
Sugar	1.75 oz	0.050	10.00
Total	1 lbs 7.25 oz	0.650	130.00

Process

- Before making the custard cream, scale the final preparation, review the assembly process and have all molds and components ready. Next, melt the chocolate and bloom the gelatin.
- Bring the milk and vanilla to a boil.
- Combine the egg yolk and the sugar.
- Pour 1/3 of the milk over the yolk mixture and stir with a spatula.
- Return the egg mixture to the pot and continue to stir constantly agitating the bottom of the pot. Add the bloomed, drained gelatin and stir to incorporate.
- Cook until the mixture is 180° F and thickened. Do not over-cook.
- Strain through a fine mesh strainer over the melted chocolate.
- Continue with the final mousse preparation below.

Final Mousse Preparation

Ingredients	Lbs & Oz	Metric	%
Custard Cream	1 lb	0.450	62.5
Gelatin	4 sheet	4 sheet	1.5
White Chocolate	25.3 oz	0.710	100
Whipping Cream	22.8 oz	0.640	90
Total	4 lbs	1.807	254

Process

- Form an emulsion between the melted chocolate and the custard cream.
- Whip the cream to soft peaks and fold it into the ganache base when it is 90°-95°F in two stages.

Assembly

- Place a disc of sable Breton in the center of an 8" x 2" ring mold.
- Pipe mousse around the perimeter of the sable breton and mask the sides of the ring mold with mousse.
- Deposit white chocolate mousse over the sable Breton a little more than halfway up the mold.
- Press in a frozen disc of the rhubarb compote to a height 1/3 the height of the mold.
- Cover the compote with mousse and then place the strawberry gelée in the mold to a height of 2/3 of the way up the mold.
- Deposit to the top of the mold and make it flush to the surface of the mold.
- Freeze until ready for finishing.

White Chocolate Spray

Ingredients	Lbs & Oz	Metric	%
White Chocolate	1 lbs 2 oz	0.500	100.00
Cocoa Butter	4.5 oz	0.125	25
Total	1 lbs 6.5 oz	0.625	125.00

Process

- Melt together the white chocolate and the cocoa butter to 120°F and reserve.

Finishing

- Un-mold the cake, return it to the freezer and prepare the chocolate spray.
- Spray the cake and then transfer to a gold board and decorate with fresh strawberries, chocolate décor and candied rhubarb.

Happy Summer from all of us at SFBI ...



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What's Rising this Season ...

- exploring chocolate mousse
- developing an efficient bakery schedule
- recipe of the season
- 2006 course schedule

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