

Chapter 7



Mise en Place

To be successful in the food-service industry, cooks need more than the ability to prepare delicious, attractive, and nutritious foods. They also must have a talent for organization and efficiency. In every kitchen, a great many tasks must be completed over a given time and by a limited number of workers. No matter when these tasks are done, they all must come together at one crucial point: service time. Only if advance preparation is done thoroughly and systematically can service go smoothly.

Good chefs take pride in the thoroughness and quality of their advance preparation, or *mise en place* (meez-on-plahss). This French term, meaning “everything put in place,” has become almost a professional password in North American kitchens because food-service professionals understand its importance to the success of the establishment.

This chapter deals with the basic concepts of *mise en place* as well as specific operations that are normally part of the *mise en place*.

After reading this chapter, you should be able to

1. Define *mise en place*, and explain why care must be taken in its planning.
2. Describe five general steps used in planning *mise en place*.
3. Explain the difference in preparation requirements for set meal service and extended meal service.
4. List five guidelines to observe when sharpening a chef’s knife.
5. Demonstrate major cutting techniques required in food preparation.
6. Describe basic precooking and marinating procedures.
7. Set up and use a standard breading station.
8. Define *convenience foods* in the context of *mise en place*, and list eight guidelines for their use.

Planning and Organizing Production

Even on the simplest level, pre-preparation is necessary. If you prepare only one short recipe, you must first:

- Assemble your tools.
- Assemble your ingredients.
- Wash, trim, cut, prepare, and measure your raw materials.
- Prepare your equipment (preheat oven, line baking sheets, etc.).

Only then can you begin the actual preparation.

When many items are to be prepared in a commercial kitchen, the situation is much more complex. Dealing with this complexity is the basis of kitchen organization.

The Problem

Every food-service operation faces a basic conflict between two unavoidable facts:

1. There is far too much work to do in a kitchen to leave until the last minute, so some work must be done ahead.
2. Most foods are at their best quality immediately after preparation, and they deteriorate as they are held.

The Solution

To address this conflict, the chef must plan pre-preparation carefully. Planning generally follows these steps:

1. Break down each menu item into its stages of production.

Turn to any recipe in this book. Note the procedures are divided into a sequence of steps that must be done in a certain order to make a finished product.

2. Determine which stages may be done in advance.

- The first step of every recipe, written or not, is always part of advance preparation: *assembling and preparing the ingredients*. This includes cleaning and cutting produce, cutting and trimming meats, and preparing breadings and batters for frying.
- Succeeding steps of a recipe may be done in advance *if the foods can then be held without loss of quality*.
- Final cooking should be done as close as possible to service for maximum freshness.

Frequently, separate parts of a recipe, such as a sauce or a stuffing, are prepared in advance, and the dish is assembled at the last minute.

In general, items cooked by dry-heat methods, such as broiled steaks, sautéed fish, and French-fried potatoes, do not hold well. Large roasts are an important exception to this rule. Items cooked by moist heat, such as braised beef, soups, and stews, are usually better suited to reheating or holding in a steam table. Delicate items should always be freshly cooked.

3. Determine the best way to hold each item at its final stage of pre-preparation. **Holding temperature is the temperature at which a product is kept for service or for storage. Holding temperatures for all potentially hazardous foods must be outside the Food Danger Zone.**

- Sauces and soups are frequently kept hot, above 135°F (57°C), for service in steam tables or other holding equipment. Foods such as vegetables, however, should be kept hot for short periods only because they quickly become overcooked.

- Refrigerator temperatures, below 41°F (5°C), are best for preserving the quality of most foods, especially perishable meats, fish, and vegetables, before final cooking or reheating.

4. Determine how long it takes to prepare each stage of each recipe. Plan a production schedule beginning with the preparations that take the longest.

Many operations can be carried on at once because they don't all require your complete attention the full time. It may take 6 to 8 hours to make a stock, but you don't have to stand and watch it all that time.

5. Examine recipes to see if they might be revised for better efficiency and quality as served.

For example:

- Instead of preparing a full batch of green peas and holding them for service in the steam table, you might blanch and chill them, then heat portions to order in a sauté pan, steamer, or microwave oven.
- Instead of holding a large batch of veal scaloppine in mushroom sauce in the steam table, you might prepare and hold the sauce, sauté the veal to order, combine the meat with a portion of the sauce, and serve fresh from the pan.

Caution: Unless you are in charge of the kitchen, do not change a recipe without authorization from your supervisor.

The Goal

The goal of pre-preparation is to do as much work in advance as possible *without loss of quality*. Then, at service time, all energy can be used for finishing each item immediately before serving, with the utmost attention to quality and freshness.

Many preparation techniques in common use are designed for the convenience of the cooks at the expense of quality. Remember, quality should always take highest priority.

Adapting Preparation to Style of Service

The way you plan production and do your *mise en place* depends in large part on the style of meal service. The following discussion of *set meal service* and *extended meal service* illustrates the basic differences.

SET MEAL SERVICE

- All customers eat at one time.
- Often called *quantity cooking* because large batches are prepared in advance.
- Examples: school cafeterias, banquets, employee dining rooms.

The traditional method of set meal preparation, still widely used, is to prepare the entire quantity of each item in a single large batch and to keep it hot for the duration of the meal service. This method has two major disadvantages:

- Deterioration of quality due to long holding.
- Large quantities of leftovers.

Modern high-speed equipment, such as pressure steamers, convection ovens, infrared ovens, and microwave ovens, make possible a system called *small-batch cooking*. Required quantities are divided into smaller batches, placed in pans ready for final cooking or heating, and then cooked only as needed. The advantages of this system are

- Fresher food, because it is not held as long.
- Fewer leftovers, because servings not needed are not cooked.

Small-batch cooking also accommodates items prepared in advance and frozen or chilled for storage.

EXTENDED MEAL SERVICE

- Customers eat at different times.
- Often called *à la carte cooking* because customers usually select items from a written menu (*carte* in French).
- Examples: restaurants, short-order counters.

Individual items are cooked to order rather than cooked ahead, but pre-preparation is extensive, down to the final cooking stage.

The short-order cook, for example, must have everything ready to go: cold meats, tomatoes and other sandwich ingredients sliced and arranged, spreads prepared and ready, hamburger patties shaped, garnishes prepared, and so on. If the cook has to stop during service to do any of these things, orders will back up and service will fall behind.

A steak that takes 10 minutes to broil may be cut and trimmed in advance, but broiling should be started 10 minutes before it is to be served.

Obviously, if the last step in a recipe is to braise the item for 1½ hours, one cannot wait until an order comes in before beginning to braise. An experienced cook can estimate closely how many orders will be needed during the meal period and prepare a batch that, ideally, will finish braising just when service begins.

Note the differences in these two methods for Chicken Chasseur. In both cases, the final product is chicken in a brown sauce with mushrooms, shallots, white wine, and tomatoes.

1. Quantity method—Chicken Chasseur:

Brown chicken in fat; remove.

Sauté shallots and mushrooms in same fat.

Add flour to make a roux.

Add white wine, tomatoes, brown stock, seasonings; simmer until thickened.

Add chicken; braise until done.

2. À la carte method—Chicken Chasseur:

Prepare Sauce Chasseur in advance; hold in bain-marie.

For each order:

Brown chicken in sauté pan; finish cooking in oven.

Deglaze pan with white wine; reduce.

Add one portion of sauce; add chicken and simmer briefly; serve.

Mise en Place: The Required Tasks

Up to this point, we have discussed planning the production schedule. Our planning helps us determine the tasks we must do before beginning the final cooking during the meal service period. Chefs refer to performing these preliminary tasks as “doing the mise en place.” In many restaurants, especially large ones, the mise en place is extensive. It includes the preparation of stocks, sauces, breadings, and batters as well as the cutting and trimming of all the meat, poultry, fish, and vegetables the chef expects will be needed during the meal service.

A large part of a cook’s workday is spent doing mise en place. This means that a large part of learning how to cook is learning how to do mise en place. In fact, a large part of this book is devoted to these tasks of preparation. There are many more such tasks than can be included in a single chapter.

The remainder of this chapter discusses the most basic and general skills required for a mise en place. The most basic of these are knife skills. Fundamentals such as how to hold the chef’s knife, how to maintain a sharp edge, and how to make basic cuts are illustrated. More specific techniques required for individual food products are explained in appropriate chapters later in the book. For example, vegetable trimming techniques are discussed in the first vegetable chapter, methods for cutting chicken in the first poultry chapter, and stock and sauce mise en place in Chapter 8.

KEY POINTS TO REVIEW

- What does *mise en place* mean? What kinds of tasks are included in this term?
- What are the five steps in planning mise en place?
- How does mise en place for *à la carte* service differ from mise en place for set meal service?

Using the Knife

Many laborsaving tools are available for cutting, chopping, and slicing fresh foods. Chapter 3 lists the basic kinds.

The chef's knife or French knife, however, is still the cook's most important and versatile cutting tool. The knife is more precise than a machine. Unless you are cutting a large quantity, the knife can even be faster. Cleaning a large machine takes time.

To get the best use out of your knife, *you must learn to keep it sharp and to handle it properly.*

Keeping a Sharp Edge

THE SHARPENING STONE

A stone is the traditional tool for sharpening a chef's knife. The best electric sharpeners do an excellent job of sharpening chef's knives, but many models wear away too much of your expensive knife without making a good edge. Modern professional knives are much harder than the old carbon steel knives, so they are more difficult to sharpen on a stone. Nevertheless, using a stone correctly is a valuable skill.

Follow these guidelines:

1. Hold the blade at a constant 20-degree angle to the stone, as shown in Figure 7.1.
2. Make light, even strokes, the same number on each side of the blade.
3. Sharpen in one direction only to get a regular, uniform edge.
4. Do not oversharpen.
5. Finish with a few strokes on the steel (see next page), and then wipe the blade clean.

Figure 7.2 illustrates one of several sharpening methods. There are other good ones, too, and your instructor may prefer a method not illustrated here.



Figure 7.3 To use a manual sharpener, draw the blade through the sharpener from the heel to the tip of the knife. Do not press down hard, but make several light strokes.

OTHER KNIFE SHARPENERS

As mentioned previously, today's professional knives are made of an especially hard material that is more difficult to sharpen by traditional methods. As a result, chefs often use other sharpeners to simplify the task. Such sharpeners typically have two stones set at the correct angle, so it is necessary only to draw the knife between them. Manual and power models of these sharpeners are available. Figure 7.3 shows a manual sharpener in use.

THE STEEL

This tool is used not to sharpen the edge but to *true the edge* (to perfect it, or to smooth out irregularities) and to *maintain the edge* (to keep it sharp as it is used).

Observe these guidelines for using the steel:

1. Hold the blade at a constant 20-degree angle to the steel, just as when using the stone (Figure 7.2). A smaller angle will be ineffective. A larger one will dull the edge.
2. Make light strokes. Do not grind the knife against the steel.
3. Make even, regular strokes. Alternate each stroke, first on one side of the blade, then on the other.
4. Use no more than five or six strokes on each side of the blade. Too much steeling can actually dull the blade.
5. Use the steel often. Then you will rarely have to sharpen the knife on the stone.

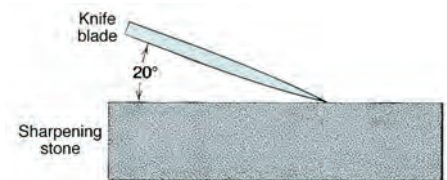


Figure 7.1 When sharpening a knife, hold the blade at a 20-degree angle to the stone.

Figure 7.2 Using a sharpening stone.



(a) Hold the knife firmly. Start with the tip of the knife against the stone as shown, and hold the edge against the stone at a 20-degree angle. Use the guiding hand to keep an even pressure on the blade.



(b) Start to draw the knife over the stone. Press very gently on the blade.



(c) Keep the motion smooth, using even, light pressure.



(d) Draw the knife across the stone all the way to the heel of the blade.

Figure 7.4 Using a steel.



(a) Hold the steel and the knife away from your body. With the knife in a vertical position and at a 20-degree angle to the steel, touch the steel with the heel of the blade.



(b) Pass the knife lightly along the steel, bringing the blade down in a smooth arc.



(c) Complete the movement. Do not strike the guard of the steel with the tip of the blade.



(d, e, f) Repeat the motion on the other side of the steel.



Figure 7.4 illustrates one of several steeling methods. This one is popular, but several others are equally correct. Carefully observe your instructors' demonstrations of their preferred methods.

Handling the Knife

THE GRIP

A proper grip gives you maximum control over the knife, increases your cutting accuracy and speed, prevents slipping, and lessens the chance of an accident. The type of grip you use depends, in part, on the job you are doing and the size of the knife.

The grip illustrated in Figure 7.5 is one of the most frequently used for general cutting and slicing. Many chefs feel that grasping the blade with the thumb and forefinger in this manner gives them greatest control.

Holding the knife may feel awkward at first, but practice will make it seem natural. Watch your instructors demonstrate the grips they use, and then practice under their supervision.



Figure 7.5 Grasping the blade of the knife between the thumb and forefinger gives the worker good control over the blade.

THE GUIDING HAND

While one hand controls the knife, the other hand controls the product being cut. Proper positioning of the hand achieves three goals:

1. **Hold the item being cut.**

In Figure 7.6, the item is held firmly so it will not slip.

2. **Guide the knife.**

Note the knife blade slides against the fingers. The position of the hand controls the cut.

3. **Protect the hand from cuts.**

Fingertips are curled under, out of the way of the blade.



Figure 7.6 The position of the guiding hand, which holds the item being cut or sliced and also guides the blade, from two points of view.

Basic Cuts and Shapes

Cutting food products into uniform shapes and sizes is important for two reasons:

1. It ensures even cooking.
2. It enhances the appearance of the product.

Figure 7.7 shows common shapes, with their names and dimensions. The following terms describe other cutting techniques:

Chop: to cut into irregularly shaped pieces.

Concasser (con-cass-say): to chop coarsely.

Mince: to chop into very fine pieces.

Emincer (em-man-say): to cut into very thin slices (does not mean "to mince").

Shred: to cut into thin strips, either with the coarse blade of a grater (manual or power) or with a chef's knife.

Figure 7.7 Basic cuts and shapes.



(a) Tourné: 2 inches long \times $\frac{3}{4}$ inches in diameter, with 7 sides, and flat-ended (5 cm \times 2 cm).



(b) Large dice: $\frac{3}{4} \times \frac{3}{4} \times \frac{3}{4}$ inch (2 \times 2 \times 2 cm).



(c) Medium dice: $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$ inch (12 \times 12 \times 12 mm).



(d) Small dice: $\frac{1}{4} \times \frac{1}{4} \times \frac{1}{4}$ inch (6 \times 6 \times 6 mm).



(e) Brunoise: $\frac{1}{8} \times \frac{1}{8} \times \frac{1}{8}$ inch (3 \times 3 \times 3 mm).



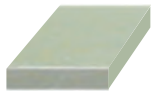
(f) Fine brunoise: $\frac{1}{16} \times \frac{1}{16} \times \frac{1}{16}$ inch (1.5 \times 1.5 \times 1.5 mm).



(g) Rondelle: round or bias-round cuts, varied diameter or thickness.



(h) Paysanne: $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{2}$ inch (12 \times 12 \times 3 mm; round, square, or rectangular).



(i) Lozenge: $\frac{1}{2} \times \frac{1}{2} \times \frac{1}{8}$ inch (12 \times 12 \times 3 mm; diamond-shape).



(j) Fermière: irregular shape, varied diameter; thickness as needed.



(k) Bâtonnet: $\frac{1}{4} \times \frac{1}{4} \times 2-2\frac{1}{2}$ inches (6 \times 6 \times 5-6 cm).



(l) Julienne (or allumette potatoes): $\frac{1}{8} \times \frac{1}{8} \times 1-2$ inches (3 \times 3 \times 25-50 mm).



(m) Fine julienne: 2 \times $\frac{1}{16} \times 1-2$ inches (1.5 \times 1.5 \times 25-50 mm).

Cutting Techniques

Different parts of the blade are appropriate for different purposes, as shown in Figure 7.8. (Note: Prying off bottle caps is not a function of any part of the knife.)

Figure 7.8 Using different parts of the knife blade.



(a) The tip of the knife, where the blade is thinnest and narrowest, is used for delicate work and small items.



(b) The center of the blade is used for most general work.



(c) The heel of the knife is used for heavy or coarse work, especially when greater force is required.

1. Slicing.

Two basic slicing techniques are illustrated in Figures 7.9 and 7.10. When carrots and similar items are cut into round slices as shown, the cut is called *rondelle*.

Figure 7.9 Slicing technique 1.



(a) Start the knife at a sharp angle, with the tip of the knife on the cutting board.



(b) Move the knife forward and down to slice through the carrot.



(c) Finish the cut with the knife against the board. For the second slice, raise the heel of the knife and pull it backward, but be sure the tip stays on the board.

Figure 7.10 Slicing technique 2.



(a) Start the blade at a 45-degree angle, with the tip on the cucumber against the fingers of the guiding hand.



(b, c) Slice downward and forward through the item.



2. Cutting dice, brunoise, bâtonnet, allumette, and julienne.

Figure 7.11 shows the steps in dicing a product, using a potato to illustrate. Note in Figure 7.11c that the process of cutting dice first requires you to cut stick shapes, such as *bâtonnet*. Thus, this illustration demonstrates the method used to cut not only *dice* and *brunoise* (brun wahz) but also *bâtonnet* (bah toh nay), *allumette* (ah lyoo met), and *julienne* (zhoo lee enn).

Figure 7.11 Slicing a potato.


(a) Square off the peeled, eyed potato by cutting a slice from all sides. Use the trimmings for mashed potatoes or soup.



(b) Cut the potato into even slices of the desired thickness. Here we are making $\frac{1}{4}$ -inch (6-mm) thick dice, so the slices are $\frac{1}{4}$ -inch (6-mm) thick.



(c) Stack the slices and again slice across the stack in even $\frac{1}{4}$ -inch (6-mm) slices. You now have batonnets potatoes, slightly smaller than regular French fries. Slices $\frac{1}{8}$ inch (3 mm) thick would give you allumette potatoes.



(d) Looking from this angle shows how the slices have been stacked up.



(e) Pile the batonnets together and cut across in slices $\frac{1}{4}$ inch (6 mm) apart. You now have perfect $\frac{1}{4}$ inch (6 mm) dice.



Figure 7.12 Cut the vegetable into sticks $\frac{1}{2}$ inch (12 mm) square. To cut the sticks into paysanne, cut them crosswise into thin slices.

3. Cutting *paysanne*.

Paysanne are thin square, or roughly square, cuts. The procedure begins the same as for cutting medium dice. However, in the last step, cut the $\frac{1}{2}$ -inch (12-mm)-thick sticks into thin slices rather than into dice. Figure 7.12 illustrates.

4. Cutting *lozenges*.

This is a diamond-shape cut, as illustrated in Figure 7.13.

5. Cutting *fermière*.

Fermière is an irregular slice. Shapes may vary, depending on the item, but the pieces should be of uniform size. Thickness must also be uniform, usually around $\frac{1}{8}$ inch (3 mm). Cut the item lengthwise into pieces of roughly uniform size and shape, and then slice as shown in Figure 7.14.

6. Making *oblique cuts*.

Also called the *roll cut*, this cut is for long, cylindrical vegetables such as carrots. As illustrated in Figure 7.15, hold the knife at an angle, cut, roll the vegetable one quarter-turn, and make the next cut. For tapered vegetables, change the angle as you go to keep the pieces of approximately equal size.



Figure 7.13 To cut lozenges, first cut the vegetable into thin slices, and then cut these slices lengthwise into strips about $\frac{1}{8}$ inch (3 mm) wide. Cut the strips at an angle to form diamond shapes.



Figure 7.14 To cut *fermière*, cut the item lengthwise into roughly equal pieces, and then slice uniformly.



Figure 7.15 To make oblique cuts, cut the vegetable at a sharp angle, roll one quarter-turn, and make another cut.

7. Dicing an onion.

Dicing an onion presents a special problem for cutting because its form is in layers, not a solid piece. This technique is illustrated in Figure 7.16.

Figure 7.16 Dicing an onion.



(a) Cut the peeled onion in half lengthwise, through the root end. Place one half on the cutting board, cut side down.



(b) With the root end away from you, make a series of vertical lengthwise cuts. Do not cut through the root end. The closer together you make the cuts, the smaller the dice will be.



(c) Holding the onion carefully at the top, make a few horizontal cuts toward but not through the root end, which is holding the onion together.



(d) Finally, slice across the onion to separate it into dice. Again, the closer together the cuts, the smaller the dice.



(e) Continue making slices almost to the root end. The root end may be rough cut for mirepoix, to be used for stocks, sauces, and roasts.



Figure 7.17 To chop mirepoix, cut onions, celery, and carrots roughly into pieces of approximately equal size. The exact size depends on what the mirepoix is to be used for.

8. Chopping mirepoix.

Mirepoix is a mixture of coarsely chopped vegetables, primarily onions, carrots, and celery, used to flavor stocks, gravies, sauces, and other items, as explained in Chapter 8. Because mirepoix is not served—rather, it is almost always strained out of the product before finishing—neatness of cut is not important. The products are cut roughly into pieces of approximately uniform size—small pieces if cooking time will be short, larger pieces for longer cooking times. Figure 7.17 illustrates mirepoix ingredients being cut.

9. Chopping herbs.

This chopping technique is used to cut a product when no specific shape is needed. Figure 7.18 illustrates chopping parsley.

In the case of chives and scallions, a more regular cut is used, similar to the slicing cut used for larger items like carrots. Figure 7.19 illustrates this procedure.



Figure 7.18 Chopping with a French knife. Holding the tip of the knife against the cutting board, rock the knife rapidly up and down. At the same time, gradually move the knife sideways across the product on the board so the cuts pass through all parts of the pile of food. After several cuts, redistribute the pile and begin again. Continue until the product is chopped as fine as you want.



Figure 7.19 Stack chives and cut crosswise into very thin slices.

10. Cutting *parisienne*.

Cuts made with a ball cutter are perhaps most often used for potatoes. Potatoes cut into large balls, about 1½ inch (3 cm), are called *parisienne* (pah ree zee enn). When cut into smaller balls, about ¾ inch (2.5 cm), they are called *noisette* (nwah zet). Of course, other solid vegetables, such as turnips, as well as many fruits, can be cut the same way. The procedure is illustrated in Figure 7.20.

Figure 7.20 Cutting *parisienne* potatoes.



(a) Place the ball cutter against the potato as shown.



(b) With the thumb, press the cutter firmly into the potato as far as it will go.



(c) Lift the handle of the cutter outward, twist the cutter around, and remove the ball.

11. Cutting *tournéed* vegetables.

To *tourné* (toor nay) a vegetable is to cut it into a neat seven-sided oval shape, as illustrated in Figure 7.21. Many root vegetables, such as carrots and turnips, are cut this way. When potatoes are *tournéed*, they are named according to their size. *Cocotte* potatoes are about 1½ inches (4 cm) long. *Château* potatoes are about 2 inches (5 cm) long.

Figure 7.21 *Tournéed* potatoes and other root vegetables.



(a) Cut the potatoes roughly into pieces slightly larger than the final size desired. Cut off the top and bottom of each piece so the top and bottom are flat and parallel.



(b) Hold the potato between the thumb and forefinger. Place the paring knife against the top edge as shown and the thumb of the cutting hand firmly against the potato. Your hand should be far enough up on the blade to maintain steady control.



(c) Cut down toward your thumb with a curving movement of the blade.



(d) Turn the potato slightly (one-seventh of a full turn, to be exact) and repeat the motion.



(e) The finished product. If perfectly done, the potato has seven sides (but customers rarely count them).

12. Peeling grapefruit.

This technique, as shown in Figure 7.22, can also be used for peeling yellow turnips or other round vegetables and fruits with heavy peels.

Figure 7.22 Peeling a grapefruit.



(a) Cut off the ends of the grapefruit and turn it on a flat end so it is stable. Slice off a section of the peel, following the contour of the grapefruit.



(b) Make sure the cut is deep enough to remove the peel but not so deep as to waste the product.



(c) Continue making slices around the grapefruit until all the peel is removed.



(d) Slice or section the fruit. Squeeze the remaining pulp for juice. The membrane-free citrus section cut by this method are called *suprêmes*.

13. Chiffonade.

This term refers to cutting leaves into fine shreds. It is applied most often to lettuce and sorrel. To cut *chiffonade*, remove the heavy leaf ribs, roll the leaves into a tight cylinder, and then slice the cylinder crosswise into thin shreds, as shown in Figure 7.23.

Figure 7.23 Cutting a chiffonade of sorrel.



(a) Roll the leaves into a cylinder.



(b) Cut crosswise into thin strips or shreds.

14. Cutting citrus zest.

With a paring knife, cut strips from the citrus peel, removing only the colored part, not the white part below it. Then, with a chef's knife, cut the zest into thin strips or julienne, as shown in Figure 7.24b. An alternative method is to use a citrus zester, as shown in Figure 7.24c.

Figure 7.24 Cutting citrus zest.



(a) Use a paring knife to cut thin strips from the peel, being careful to cut only the outer colored part, not the inner white pith.



(b) Cut the strips of peel into julienne.



(c) Alternatively, draw a zesting tool over the fruit to cut thin strips of zest.

KEY POINTS TO REVIEW

- How do you sharpen a knife?
- When performing most cutting techniques, what is the correct and safe position of the guiding hand—that is, the hand not holding the knife?
- What are the dimensions of the following cuts: large dice, medium dice, small dice, brunoise, fine brunoise, bâtonnet, julienne, fine julienne, rondelle, paysanne, lozenge, tourné?

Preliminary Cooking and Flavoring

Advance preparation often requires precooking and flavoring of ingredients to make them ready for use in the finished recipe.

On the most obvious level, if a recipe for chicken salad calls for cooked, diced chicken, you must first cook the chicken before you can proceed with the recipe. A complete cooking procedure, in such a case, is part of the *mise en place*, or pre-preparation.

Blanching and Parcooking

Partial cooking is a significant part of advance preparation. It requires a degree of culinary skill and judgment to determine when and how much cooking is necessary or desirable.

Partial cooking may be done by any moist-heat or dry-heat method. Those commonly used are simmering or boiling (parboiling), steaming, and deep-frying (especially for potatoes). The term *blanching* may mean any of these methods, but it usually implies *very brief* cooking.

There are four main reasons for blanching or parcooking:

1. To increase holding quality.

Heating helps preserve foods by:

- Destroying bacteria that cause spoilage.
- Destroying enzymes that discolor foods (as when potatoes turn brown) and cause them to deteriorate.

2. To save time.

It takes less time to finish parboiled vegetables for service than it does to finish raw vegetables. Large batches of foods may be blanched and chilled, and individual portions then finished to order.

Items, such as roast duck, that take too long to cook completely to order are often roasted half to three-quarters done and then finished as the orders are received.

3. To remove undesirable flavors.

Some variety meats and certain strong-flavored vegetables, such as rutabaga, are sometimes blanched to make them milder and more acceptable to the customer.

4. To enable the product to be processed further.

For example, vegetables and fruits such as tomatoes and peaches, as well as some nuts, are blanched to loosen the skins for peeling.

Sweetbreads are blanched so they are firm enough for slicing and breading or other kinds of handling.

Marinating

To *marinate* means to soak a food product in a seasoned liquid in order to:

1. Flavor the product.
2. Tenderize the product.

The tenderizing effect of the acids in the marinade is relatively small. It is still essential to match the proper cut of meat with the proper cooking techniques for greatest tenderness.

The marinade can also serve as the cooking medium and become part of the sauce. Vegetable marinades, called *vinaigrettes*, are served cold with the vegetables as salads or hors d'oeuvres without further cooking or processing.

Marinades have three categories of ingredients:

1. Oil.

Oil helps preserve the meat's moisture. Sometimes it is omitted, especially for long marinations, when the oil would only float on top, out of contact with the product being marinated.

Tasteless vegetable oils are used when a neutral flavor is required. Specialty oils, such as olive oil, are used to add flavor to the item being marinated.

2. Acid from vinegar, lemon juice, wine.

Acid helps tenderize protein foods.

It carries flavors (its own and dissolved flavors from spices and herbs).

Use caution when employing strong acids, such as vinegar and lemon juice. A marinade that is too acidic will partially coagulate the protein of the meat, making it seem partially cooked. When the meat is then cooked, its texture will not be as desirable. Strong acids can be used in marinades if they are used in small quantities or if the meat is marinated only a few hours.

3. Flavorings—spices, herbs, vegetables.

A wide choice is available, depending on the purpose.

Whole spices release flavors more slowly, so they are more suitable for long marination.

KINDS OF MARINADE

1. Cooked.

Used when long keeping quality is important. Modern refrigeration has made cooked marinades less widely used. An advantage of cooked marinades is that spices release more flavor into the marinade when it is cooked.

2. Raw.

Most widely used for long marination under refrigeration. For example, see the recipe for Sauerbraten (p. 366). Figure 7.25 shows meat in a raw marinade.



Figure 7.25 Beef chuck in a raw marinade of red wine, wine vinegar, spices, and aromatic vegetables.

3. Instant.

The range of flavors and purposes is wide. Used for marinating a few minutes up to several hours or overnight. For example, see the recipe for London Broil (p. 328).

4. Dry.

A dry marinade, also called a dry rub or a spice rub, is a mixture of salt, spices, and herbs that is rubbed or patted onto the surface of a meat, poultry, or fish item. In some cases, a little oil or a moist ingredient, such as crushed garlic, is mixed with the spices to make a paste. The item is then refrigerated to allow it time to absorb the flavors. The rub may be left on the item or scraped off before cooking. This technique is widely used for barbecued meats. For an example of a dry marinade, see page 394. Figure 7.26 shows a dry rub being applied to a large cut of meat.

Dry marinades are an effective way to flavor meats. Naturally, because they usually don't contain an acid, you can't expect dry marinades to produce the slight tenderizing effects of liquid marinades containing acids.



Figure 7.26 Applying a dry rub to a rack of spareribs.

Guidelines for Marinating

1. Marinate under refrigeration (unless product is to be cooked only a few minutes).
2. Remember: The thicker the product, the longer it takes for the marinade to penetrate.
3. Use an acid-resistant container, such as stainless steel, glass, crockery, or some plastics.
4. Tie spices in a cheesecloth bag (sachet) if easy removal is important.
5. Cover product completely with marinade. When marinating small items for a short time, you may use less liquid, but you must then turn the product frequently for even penetration.

BRINES

A *brine* may be considered a special kind of marinade. The primary use of brines is in curing, as explained in Chapter 26 (see p. 856). However, many chefs also use them for roast poultry and pork because of their tenderizing and moisturizing effects (see sidebar, p. 152). Brines are rarely used for red meats.

Procedure for Brining Meats and Poultry

1. Assemble the following ingredients:

Water	1 gal	4 L
Kosher salt	4 oz	125 g
Sugar	3 oz	90 g
Bay leaves	2	2
Dried thyme	2 tsp	10 mL
Whole cloves	4	4
Peppercorns	1 tbsp	15 mL

2. Combine the water, salt, and sugar in a stockpot. Make a sachet by tying the herbs and spices in a piece of cheesecloth. Add the sachet to the pot.
3. Bring the water to a boil, stirring to make sure the salt and sugar are dissolved.
4. Let cool, then refrigerate until completely cold. Remove the sachet.
5. Put the meat or poultry into the brine. Poultry must be weighted to keep it submerged. Refrigerate.
6. For large cuts, marinate at least 6 hours or as long as 2 days. For small pieces, such as chops and cutlets, marinate 2 to 6 hours.
7. Remove the meat from the brine, dry it, and proceed with the recipe. Treat the brined meat like fresh meat.
8. Discard the used brine.

HOW A BRINE WORKS

Brines moisturize and tenderize roast meats. At first, salt draws moisture from meat tissues. But some of the brine is also absorbed into the meat. When the salt of the brine interacts with the proteins, it dissolves some of the protein structure, and this has a tenderizing effect on the meat. Also, because the salt interacts with the proteins, the capacity of the meat to hold moisture is increased. The weight of the raw brined meat is about 10 percent greater than the weight of the meat before brining.

A brine consists primarily of salt dissolved in water. Because of the harsh taste a high salt concentration can give to meats, chefs usually add sugar to the brine as well to counteract the strong salt flavor. In addition, herbs and aromatics may be added to the brine, although these have only a mild flavoring effect.

Salt concentration in brines ranges from 3 to 6 percent. The formula given in the procedure makes a concentration of 3 percent, so you could double the salt (and sugar) if desired.

Because of the salt and sugar concentration in the meat, pan drippings may not be usable for deglazing. Also, the sugar may burn to the bottom of the pan, so you may want to put a little water in the bottom of the roasting pan.

Preparation for Frying

Most foods to be deep-fried, with the major exception of potatoes, are first given a protective coating of breading or batter. This coating serves four purposes:

1. It helps retain moisture and flavor in the product.
2. It protects the fat against the moisture and salt in the food, which would speed the deterioration of the frying fat.
3. It protects the food from absorbing too much fat.
4. It gives crispness, flavor, and good appearance to the product.

Breading

Breading means coating a product with bread crumbs or other crumbs or meal before deep-frying, pan-frying, or sautéing. The most widely used method for applying these coatings is called the *Standard Breading Procedure*.

THE THREE STAGES OF THE STANDARD BREADING PROCEDURE

1. Flour.

Helps the breading stick to the product.

2. Egg wash.

A mixture of eggs and a liquid, usually milk or water. More eggs give greater binding power but increase the cost. A small quantity of oil is occasionally added to the egg wash.

3. Crumbs.

Combine with the egg wash to create a crisp, golden coating when fried. Fine, dry bread crumbs are most often used and give good results. Also popular are Japanese-style dry bread crumbs called *panko* (Japanese for “bread crumbs”). These coarser crumbs give a pleasing texture to fried items. Other products used are fresh bread crumbs, crushed corn flakes or other cereal, cracker meal, and cornmeal.



Figure 7.27 To keep your dry hand dry, push crumbs over the top of egg-washed items in the crumb pan before touching them.

For small items like scallops and oysters, breading may be done with the aid of a series of wire baskets placed in the flour, egg wash, and crumbs, instead of by hand. The procedure is the same except the baskets are used to lift and shake small quantities of the product and to transfer them to the next basket.

To keep one hand dry during breading, use your right hand (if you are right-handed; if left-handed, reverse the procedure) only for handling the flour and crumbs. Use your other hand for handling the product when it is wet. In order to keep your dry hand dry, never handle a wet product with that hand. For example, to complete the breading of an item that has been dipped in egg wash, place it in the pan of crumbs and push more crumbs over the top of the item, as shown in Figure 7.27, and then pat them down, so all sides of the item are covered in dry crumbs before you pick it up.

Procedure for Making Bread Crumbs

1. For fresh bread crumbs, use bread that is one or two days old. If the bread is fresh, its moisture content will make it difficult to process into crumbs without making gummy wads of bread. For dry bread crumbs, lightly toast the bread in a warm oven until the bread is dry but not browned. Do not use stale bread, which has an off flavor.
2. Trim off crusts to make crumbs of a uniform light color.
3. Cut or tear the bread into smaller pieces.
4. Depending on the quantity, place the pieces in a food processor or a vertical cutter/mixer. Process until the crumbs are of the desired fineness.
5. For dry bread crumbs of uniform size, pass the processed crumbs through a sieve (also called a *tamis*). See page 60.

Procedure for Proper Breading

Figure 7.28 illustrates a station setup for the Standard Breading Procedure.

1. Dry the product to get a thin, even coating of flour.
2. Season the product—or, for greater efficiency, season the flour (step 3). Do not season the crumbs. The presence of salt in contact with the frying fat breaks down the fat and shortens its life.
3. Dip the product in flour to coat evenly. Shake off excess.
4. Dip in egg wash to coat completely. Remove. Let excess drain off so the crumb coating will be even.
5. Dip in bread crumbs. Cover with crumbs and press them gently onto product. Make sure it is coated completely. Remove. Carefully shake off excess.
6. Fry immediately, or hold for service.
7. To hold for later service, place the breaded items in a single layer on a pan or rack and refrigerate. Do not hold very moist items, such as raw clams or oysters. The breading will quickly become soggy.
8. Strain the egg wash and sift the flour and crumbs as often as necessary to remove lumps.



Figure 7.28 Setup of station for Standard Breading Procedure. Right-handed cooks work from left to right. Left-handed cooks work from right to left, with order of pans reversed, as well.

Dredging with Flour

PURPOSE

The purpose of dredging is to give a thin, even coating of flour to a product.

Meats to be sautéed or pan-fried are often dredged with flour to give them an even, brown color and to prevent sticking.

Vegetables, such as sticks of zucchini, are sometimes coated only in flour before deep-frying to give them a light golden color and a very thin coating.

PROCEDURE

Follow steps 1 to 3 of the Standard Breading Procedure above.

Batters

Batters are semiliquid mixtures containing flour or other starch. They are used in deep-frying to give a crisp, flavorful, golden brown coating. There are many formulas and variations for batters.

1. Many liquids are used, including milk, water, and beer.
2. Eggs may or may not be used.
3. Thicker batters make thicker coatings. Too thick a batter makes a heavy, unpalatable coating.
4. Leavenings are frequently used to give a lighter product. These may be:
 - Baking powder
 - Beaten egg whites
 - Carbonation from beer or seltzer used in the batter

Two recipes for basic, typical batters are given in the recipe for deep-fried Onion Rings (p. 599), and the recipe for Fish and Chips (p. 495). These batters may be used on a wide variety of products. In addition, a recipe for tempura batter is on page 498.

Handling Convenience Foods

Convenience foods play an increasingly prominent role in the food-service industry. Their use has become so important that no student of professional cooking can afford to be without knowledge of them.

Guidelines for Handling Convenience Foods

1. Handle with the same care you give fresh, raw ingredients.

Most loss of quality in convenience foods comes from assuming they are damageproof and can be treated haphazardly.

2. Examine as soon as received.

Particularly, check frozen foods—with a thermometer—to make sure they did not thaw in transit. Put away at once.

3. Store properly.

Frozen foods must be held at 0°F (−18°C) or lower. Check your freezer with a thermometer regularly. Refrigerated foods must stay chilled, below 41°F (5°C), to slow spoilage. Shelf-stable foods (dry products, canned goods, etc.) are shelf-stable only when stored properly in a cool, dry place, tightly sealed.

4. Know the shelf life of each product.

Nothing keeps forever, not even convenience foods. (Some, like peeled potatoes, are even more perishable than unprocessed ingredients.) Rotate stock according to the first in, first out principle. Don't stock more than necessary.

5. Defrost frozen foods properly.

Ideally, defrost in a tempering box set at 28° to 30°F (−2° to −1°C) or, lacking that, in the refrigerator at 41°F (5°C) or lower. This takes planning and timing, because large items take several days to thaw.

If you are short of time, the second-best way to defrost foods is under cold running water, in the original wrapper.

Never defrost at room temperature or in warm water. The high temperatures encourage bacterial growth and spoilage.

Do not refreeze thawed foods. Quality will greatly deteriorate.

Certain foods, like frozen French fries and some individual-portion prepared entrées, are designed to be cooked without thawing.

6. Know how and to what extent the product has been prepared.

Partially cooked foods need less heating in final preparation than do raw foods. Some cooks prepare frozen, cooked crab legs, for example, as though they were raw, but by the time the customer receives them, they are overcooked, dry, and tasteless. Frozen vegetables, for a second example, have been blanched and often need only to be heated briefly.

Manufacturers are happy to give full directions and serving suggestions for their products. At least you should read the package directions.

7. Use proper cooking methods.

Be flexible. Much modern equipment is designed especially for convenience foods. Don't restrict yourself to conventional ranges and ovens if compartment steamers, convection ovens, or microwave ovens might do a better job more efficiently.

8. Treat convenience foods as though you, not the manufacturer, did the pre-preparation.

Make the most of your opportunity to use creativity and to serve the best quality you can. Your final preparation, plating, and garnish should be as careful as though you made the dish from scratch.

A **convenience food** may be defined as “any product that has been partially or completely prepared or processed by a manufacturer.” In other words, when you buy a convenience product, you are having the manufacturer do some or all of your preparation for you.

Of course, you must pay for this service, as reflected in the price of the product. Although buying the convenience product will likely cost you more than buying the raw materials, you save in increased kitchen efficiency. As you remember from Chapter 5, labor costs as well as food costs must be figured into your menu prices.

Processed foods for restaurants and institutions range from partially prepared items that can be used as components in your recipes, such as frozen fish fillets, peeled potatoes, concentrated stock bases, and frozen puff pastry dough, to fully prepared items that need only be reconstituted or served as is, such as frozen prepared entrées and frozen pies and pastries. Some items, like frozen French fries, have wide acceptance, while other more fully prepared foods continue to be resisted by both customer and operator.

In general, the more completely a product is prepared by the manufacturer, the less it reflects the individuality of the food-service operator—and the less opportunity the cooks have to give it their own character and quality.

Is a stock made from scratch better than a product made from a convenience base? Most quality-conscious chefs would probably answer “Yes!” But the correct answer is, “Not if the homemade stock is poorly made.” No matter what products you use, there is no substitute for quality and care. The fresh product is potentially the best, but not if it is badly stored or handled. Of course, convenience foods also require proper handling to maintain their quality.

The key to understanding and handling convenience foods is considering them as normal products with part of the pre-prep completed rather than as totally different kinds of products unlike your normal raw materials. *Convenience products are not a substitute for culinary knowledge and skill.* They should be a tool for the good cook rather than a crutch for the bad cook. It takes as much understanding of basic cooking principles to handle convenience products as it does fresh, raw ingredients, particularly if you want the convenience product to taste as much like the fresh as possible.

KEY POINTS TO REVIEW

- What is blanching? Why are foods blanched?
- What are the basic types of marinades?
- What are the three stages of the Standard Breeding Procedure? Describe how to set up a breeding station.
- What are convenience foods? Describe eight guidelines for handling and using convenience foods.

TERMS FOR REVIEW

mise en place	shred	lozenge	chiffonade
holding temperature	rondelle	fermière	blanching
set meal service	dice	oblique cut	marinate
extended meal service	brunoise	parisienne	brine
chop	bâtonnet	noisette	Standard Breeding Procedure
concasser	allumette	tourné	panko
mince	julienne	cocotte	batter
emincer	paysanne	château	convenience food

QUESTIONS FOR DISCUSSION

1. How does preparation differ for set meal service and extended meal service?
2. It has been said that à la carte cooking, or cooking to order, is nothing more than small-batch cooking carried to its extreme. Based on what you know about pre-preparation, what do you think this statement means?
3. Why is it important to learn to cut foods accurately and uniformly?
4. Name six basic vegetable cuts, and give their dimensions.
5. Give six examples of foods that might be blanched or parcooked during pre-preparation, and give a reason for each.
6. Describe in detail how to set up a breeding station and how to use it to bread veal cutlets.
7. The manager of the restaurant in which you are a cook has decided to try using frozen, breaded shrimp instead of having you bread shrimp by hand, but she is worried about customer acceptance and asks for your help. How will you handle the new product?