

Moist Cooking Techniques

OBJECTIVES

After reading this section, you will be able to:

- Demonstrate moist cooking techniques.
- Demonstrate braising and stewing.

THERE'S more than one way to cook eggs. Some people like them hard-cooked, while others prefer their eggs lightly poached. Boiling and poaching are both moist cooking techniques. Cooking food using a moist technique involves heating food in a liquid other than oil. Moist cooking techniques include boiling, blanching, parboiling, simmering, poaching, and steaming. Sometimes, a moist cooking technique is applied to foods that have already been partially cooked using a dry cooking technique. This section will introduce you to moist and combination cooking techniques.



KEY TERMS

- boiling
- convection
- blanching
- parboiling
- simmering
- poaching
- steaming
- braising
- deglaze
- stewing

COOKING IN LIQUID

When cooking foods in water or other liquids, foods are completely submerged. Boiling, simmering, and poaching involve cooking in liquid.

Boiling

Boiling is a moist cooking technique in which you bring a liquid, such as water or stock, to the boiling point and keep it at that temperature while the food cooks. The boiling point of water is 212°F at sea level. When liquid reaches the boiling point, food can be added and cooked. See Fig. 15-10.

When liquid boils, a process called convection occurs. During **convection**, the liquid closest to the bottom of the pan is heated and rises to the top, while the cooler liquid descends to the bottom of the pan. This sets off a circular motion in the pan that keeps the food in constant motion and keeps it from sticking to the pan.

Boiling cooks foods quickly. However, it can be harmful to some food. The rapid circular motion of the liquid doesn't harm pasta, but it can break apart a tender piece of fish. Because of this, very few food items are cooked completely by boiling.



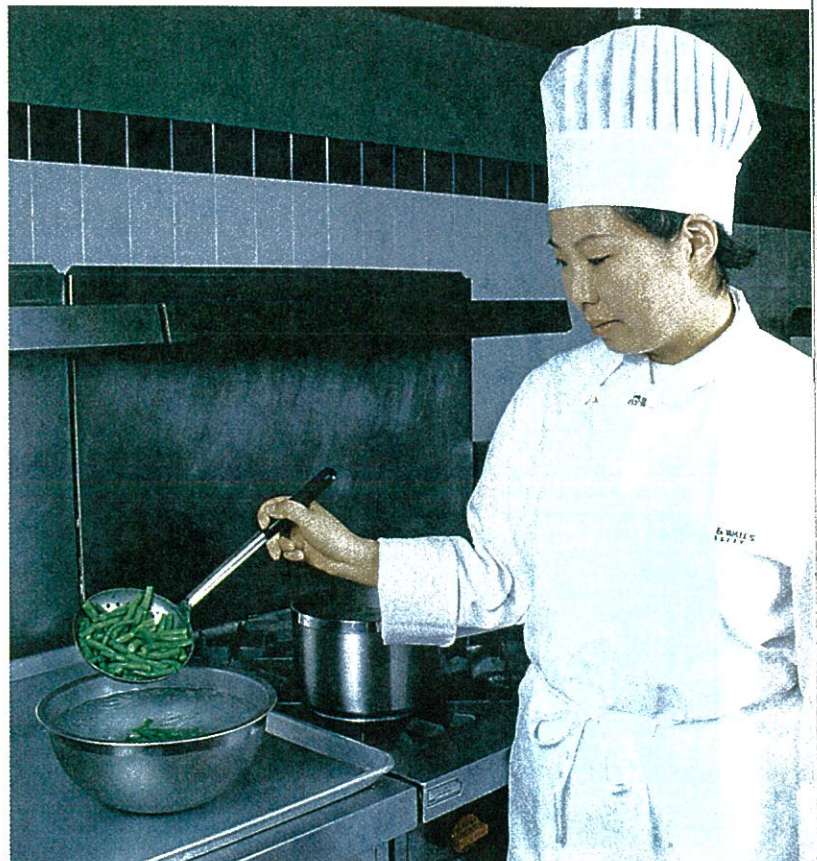
Fig. 15-10. Boiling is an effective method for cooking pasta since pasta holds its shape well as it cooks.

Blanching

Using the boiling method to partially cook food is also known as **blanching**. It is a quick way to change the flavor and keep the color in foods. Fig. 15-11 shows blanching as a two-step process:

1. Completely submerge the food in a boiling liquid and blanch, or briefly cook, it.
2. Then remove the blanched food from the liquid. If you want to make sure the food stops cooking as soon as you remove it from the liquid, plunge the food into ice water. This is called “shocking.” It will completely stop the cooking process.

Fig. 15-11. Blanching is usually a two-step process. One way to cool the food immediately after boiling it is to plunge it into ice water. What is the next step in the blanching process?



Remember that a blanched food item is only partially cooked, so a second stage of cooking is needed to complete the cooking process. For example, you might first blanch green beans and then sauté them in butter and herbs.

Blanching has many uses. In addition to simplifying the peeling process, blanching is sometimes used to:

- Precook foods before they are frozen.
- Soften herbs.
- Lock in the color of foods.
- Help preserve a food’s nutrients.
- Remove excess salt from ham or pork.
- Remove blood from meats.
- Remove strong flavors from meats.

CULINARY TIP

PEELING TOMATOES—To make it easier to peel a fresh tomato, you can lightly blanch it. This process involves immediately plunging the tomato into ice water after blanching so that it doesn't continue to cook.

Parboiling

Parboiling is a moist cooking technique that is similar to blanching in that foods are put into boiling water and partially cooked. However, the cooking time for parboiling foods is longer than for blanching. Recipes that include parboiling will give you the exact timing for a particular food item. For example, ribs are often parboiled before they are grilled. This tenderizes the meat and reduces grilling time.



Simmering

Like boiling, **simmering** involves cooking food in liquid. However, when you simmer food, it cooks slowly and steadily in a slightly cooler liquid that's heated from 185°F–200°F. The bubbles in the liquid rise slowly to the surface of the liquid but do not break the surface.

Because of the lower temperature, not as much convection action occurs, so the cooking is a much gentler process. When simmering, foods such as yellow squash and zucchini should be fully submerged in the liquid. See Fig. 15-12.

The advantages of simmering include:

- Less shrinkage of the food.
- Less evaporation and better control over evaporation.
- Less breakup of fragile food, such as fish.

Simmering is also used to reduce, or decrease the volume of, a liquid. For example, you might want to simmer spaghetti sauce to make it thicker.

Poaching

Poaching is an even gentler method of moist cooking than simmering. To poach means to cook food in a flavorful liquid between 150°F and 185°F. Generally, tender or delicate foods such as fish and eggs are poached in just enough liquid to cover the food. You can poach food on the rangetop or in the oven. Sometimes the poaching liquid is used later to make a sauce that accompanies the food item when it's served.

Fig. 15-12. Simmering cooks foods slowly. What are some of the advantages of simmering versus boiling?



Fig. 15-13. These vegetables are being steamed just before serving. What are some advantages of steaming foods?

higher, cooking the food faster. A pressure steamer holds steam under pressure. As the pressure increases, so does the temperature. For example, if you're cooking asparagus at 10 pounds of pressure (10 psi) at 240°F, and you increase the pressure to 15 psi, the temperature will rise to 250°F. Steamers cook foods, such as vegetables, without dissolving the nutrients.

STEAMING

Steamed vegetables are both tasty and nutritious. **Steaming** involves cooking vegetables or other foods in a closed environment filled with steam, such as in a pot with a tight-fitting lid. Steam is created inside the pot when water reaches the boiling point and it turns into vapor and disperses as tiny drops in the air. Although the food never touches the liquid, the temperature inside the closed environment rises high enough to cook the food. Steaming is generally faster than other moist cooking techniques. See Fig. 15-13.

If pressure is added during the steaming process, the temperature inside the pot rises even

COMBINATION COOKING

Sometimes great things happen by combining the best of two techniques. Such is the case with combination cooking. As the term suggests, combination cooking combines two techniques you've already learned: moist and dry. Two major combination techniques are braising and stewing. Braising and stewing involve both a dry and a moist cooking process. The first step for both cooking methods is usually to brown the food using dry heat. Then the food is completely cooked by simmering the food in a liquid.

Cooking food using a combination technique is especially useful for tough, but flavorful, cuts of meat. The combination cooking process tenderizes the meat. It's also an excellent way to prepare large pieces of less tender meat.

Braising

Braising is a long, slow cooking process that can produce very flavorful results. It can make tough cuts of meat more tender. Follow the steps in Fig. 15-14 to properly braise a food product.

SAFETY & SANITATION

DON'T GET BURNED BY STEAM—Take special care when removing the lids from pots or containers that may have steam trapped inside. Always tip the lid open by lifting it away from your hand and body. Steam is at least 212°F and can cause severe burns.

Fig. 15-14. The Braising Process



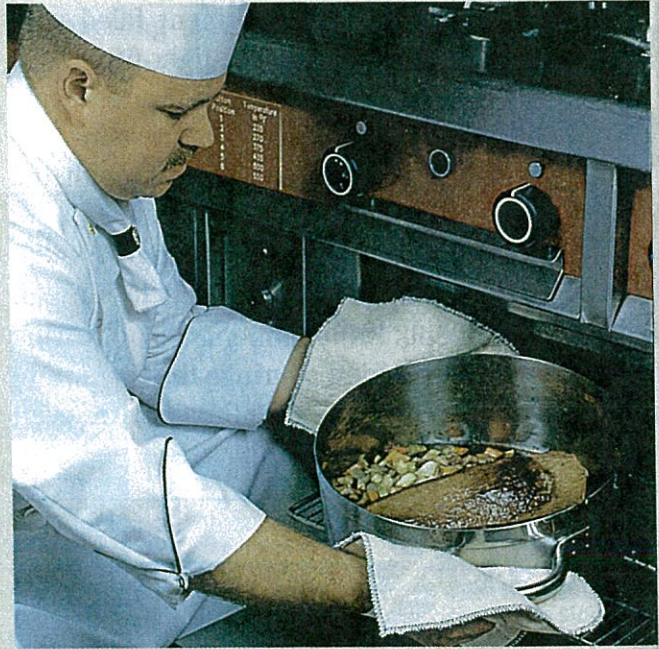
1. Begin by searing the food in a frying or roasting pan. When using meats, mirepoix is usually added to the pan when the meat is seared.



2. Remove the food from the pan and deglaze the pan. To **deglaze**, remove any leftover scraps of food from the pan; then add a small amount of hot stock or water and cook it on top of the range.



3. Return the seared food to the deglazed pan and add liquid, such as stock or sauce. Add enough liquid to cover no more than two-thirds of the food.



4. Place the pan in a 350°F oven, and cook the food slowly until it is fork tender. Turn the food every 20-30 minutes. Often, braised items are covered while cooking. Braising can also be done on the rangetop over low heat.

During the long cooking process, braising produces a very flavorful liquid. The flavors extracted from the food become highly concentrated. Imagine braising a piece of meat, such as a pork loin. The juices from the pork are slowly pulled away from the meat and mixed with the liquid in which the pork is being braised. The liquid, then, takes on the highly concentrated flavor of the meat's juices as it cooks.

Braised foods are always served with the cooking liquid. You'll want to strain, thicken, and add salt, pepper, or other spices to the liquid before serving. See Fig. 15-15.

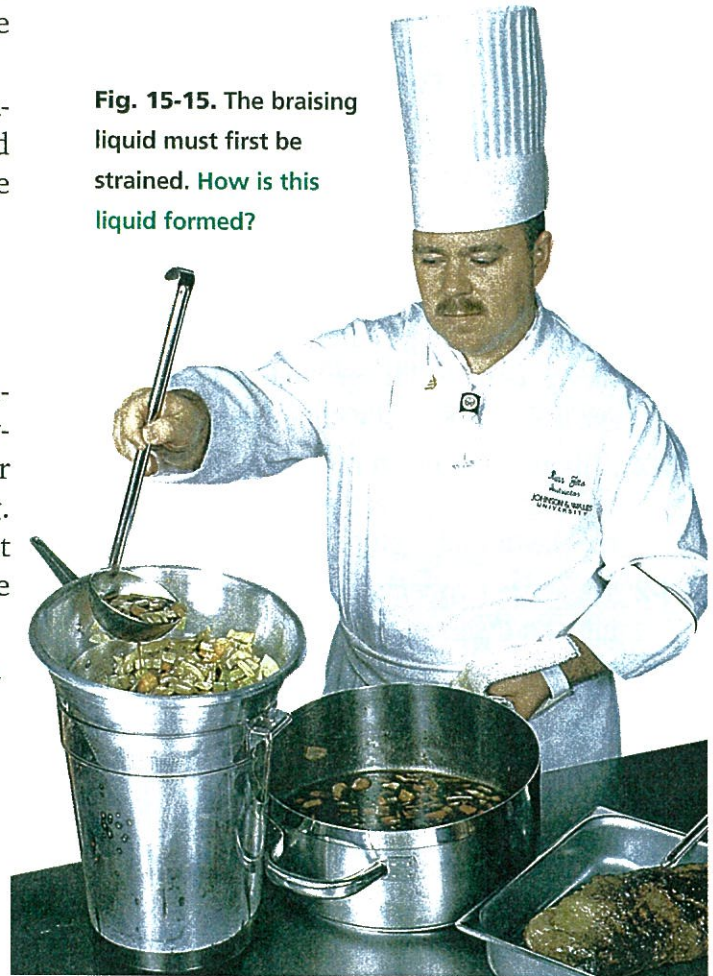
Stewing

Stewing is another combination cooking technique. However, stewed foods are completely covered with liquid during cooking. Cooking time for stewing is generally shorter than for braising. That is because the main food item in stew is cut into smaller pieces before cooking. Follow these steps to stew foods:

1. First, sear the food product in a pan over high heat. Tender cuts of meat should not be stewed or they will become tough.
2. Completely cover the food with liquid.
3. Bring the stew to a simmer and cook until tender.

4. Add vegetables, if desired, partway through simmering the main food item. This will ensure that the vegetables will not be overcooked when the main food item in the stew is fully cooked.

Fig. 15-15. The braising liquid must first be strained. How is this liquid formed?



SECTION 15-3

Knowledge Check

1. Give two reasons why you might want to simmer instead of boil a food product.
2. Explain why you would blanch foods.
3. Contrast braising and stewing.

MINI LAB

In teams, prepare a meal that includes three foods that are prepared with different moist cooking techniques. Have another team evaluate your meal. Explain how each item was prepared.