Essential Skills

Cooling Stock

1. Place hot stock into a clean, cool stockpot, and put that pot into an ice-water bath. See Figure 6.6.

2. Stir stock often. When cooled, place the pot into the cooler.

3. Alternatively, break down hot stock into smaller portions and place the smaller containers in the cooler.

4. Stir occasionally so the contents of each container cool at the same rate.

Note: Be careful not to put a large stockpot of hot stock in the cooler. It will warm the cooler and its contents.

Figure 6.6: Step 1—Place stock into a stockpot, and then place the pot into an ice-water bath.
Management of Stocks

The stocks in a kitchen must be managed carefully. Stock is perishable, so keep it refrigerated or frozen. Only remove as much stock from the cooler as required for a particular task. Discard nonfrozen stock after four days.

Frozen stock may be held for three months. Freeze it in containers that best suit the way it will be used. Ice cube trays can work, or plastic airtight containers with lids. If the container has straight sides, or the bottom is smaller than the top, the block of frozen stock can slide out easily.

Chilled stock will set up and wiggle. This is due to a gelatin formed from specific types of proteins found in the tissues of the bones that were boiled. Vegetable stocks, of course, will not set up.

Once stock is clarified and degreased, it is a fat-free food. If no salt is added, it is fairly low in sodium, but very flavorful. Use stock for cooking vegetables or rice. This boosts the flavor of the dish without adding salt or fat. Keep in mind, though, that customers requiring a vegetarian diet will not be able to eat vegetables or grains cooked in meat or fish stock.

Degreasing Stock

After the stock has been stored, it must be degreased before it can be used. Degreasing is the process of removing fat that has cooled and hardened from the surface of the stock. Just lift or scrape away the fat before reheating the stock. Figure 6.7 shows stock being degreased.

Degreasing gives the stock a clearer and purer color. It also removes some of the fat content, making the stock more healthful. As the stock reheats, additional fat and impurities will rise to the top; skim these off to keep the stock clear.

Figure 6.7: Degreasing stock makes it healthier by reducing fat. Degrease stock by skimming, scraping, or lifting hard fat.
Nutrition and the Fat Budget

Degreasing stock is an important step in creating an outstanding sauce or soup. It also helps improve the nutrition quality of recipes using that stock. The grease from the bones of animals is a saturated fat, which researchers have linked to coronary disease and certain types of cancer. People should limit the amount of fat they include in their diets.

Budgeting dietary fat intake to include some saturated fat is a reasonable approach. You might reserve part of your fat allowance for a special treat, such as a creamy, elaborate soup or sauce.

Summary

In this section, you learned the following:

- Stocks contain four essential parts: a major flavoring ingredient, liquid, aromatics, and mirepoix:
  - The major flavoring ingredient consists of bones and trimmings for meat and fish stocks and vegetables for vegetable stock.
  - The liquid most often used in making stock is water.
  - Aromatics are herbs, spices, and flavorings that create a savory smell; these include sachet d'épices or bouquet garni.
  - Mirepoix is a mixture of coarsely chopped onions, carrots, and celery that is used to flavor stocks, soups, and stews.

- There are many types of stock:
  - **White stock**: A clear, pale liquid made by simmering poultry, beef, or fish bones.
  - **Brown stock**: An amber liquid made by first browning/roasting poultry, beef, veal, or game bones.
  - **Fumet**: A highly flavored stock made with fish bones.
  - **Court bouillon**: An aromatic vegetable broth.
  - **Glace**: A reduced stock with a jelly-like consistency, made from brown stock, chicken stock, or fish stock.
  - **Remouillage**: A weak stock made from bones that have already been used in another preparation. It is sometimes used to replace water as the liquid used in a stock.
  - **Bouillon**: The liquid that results from simmering meats or vegetables; also referred to as broth.
- When using bones for stock, they must be cut to the right size and prepared by blanching, browning, or sweating.

- Degreasing is the process of removing fat that has cooled and hardened from the surface of the stock by lifting or scraping it away before the stock is reheated. Degreasing stock gives it a clearer look and removes some of the fat content.

- To cool stock, follow good food safety practices and limit the time the stock spends in the temperature danger zone (TDZ). To cool stock, place it in a clean stockpot, and then put that pot into an ice-water bath. Stir it often. When cooled, place the pot into the cooler. Another option is to break down the stock into smaller portions and place the smaller containers in the cooler. Stir occasionally so that the contents of each container cool at the same rate. Be careful not to put an entire large stockpot of hot stock in the cooler because it will warm the cooler and its contents.
Section 6.1 Review Questions

1. Define the following:
   a. Sachet d’épices
   b. Mirepoix
   c. Fumet
   d. Bouquet garni
   e. Glace

2. Describe the four important parts of stock.

3. You are responsible for cooling a large amount of chicken stock. How will you do this?

4. Describe how and why bones, shells, and vegetables are
   a. sweated.
   b. browned.
   c. blanched.

5. In the American Harvest cookbook, Chef Sonnenschmidt notes that he likes to "make Braised Short Ribs on a cold day...letting it braise and perfume the air for much of the day. If time permits, and you can resist digging in immediately, cover, refrigerate, and skim off the surface fat the next day." Why is stock a key component of this flavorful dish? And why might you need to skim surface fat off of the dish the next day?

6. Stock is a staple in every restaurant. What kind of menu can Uptown Grille offer that uses stock at lunch and at dinner, while still offering a variety of selections?

7. How can a chef identify a potential food safety hazard with a stock? After identifying it, what should the chef do?

8. Why is it important to cool a soup or stock before storage? Why not just put it in the cooler while it is hot?
Section 6.1 Activities

1. Study Skills/Group Activity: A Healthier Stock
   Work with two other students to find the recipes for two stocks (either on the Internet or in a cookbook) and compare them for nutrition value. You should test each other by asking: "How can I make this recipe more nutritious?"

2. Activity: Pictogram
   Draw a three-frame (or more) pictogram for each of the three methods of making stock from bones. It should look like a cartoon or diagram, showing the steps in each specific process.

3. Critical Thinking: Comparing Stocks
   There are many types of stock. Pick two stocks, and write a short report comparing and contrasting the ingredients, cooking process, and nutrition value of each. Suggest three dishes for which each stock might be the base.