# Stock

## Description

Students will explore beef, fish, chicken, and vegetable stocks and learn how they are used in preparing soups, sauces, and other foods. Students will prepare a chicken or vegetable stock from scratch.

## Lesson Objectives

Students will be able to:

* identify different varieties of stock
* list the ingredients used in preparing stock
* summarize methods and procedures for creating stock
* correctly use the equipment needed to prepare stock
* understand and distinguish the uses of stocks in food preparation, and
* correctly store and preserve stocks.

## Assumptions

* Students have received orientation on the subject of kitchen and food safety.
* Students have received orientation on the subject of measuring and conversion.
* The teacher will become familiar with and utilize correct stock-making techniques using appropriate resources.
* The teacher will provide a variety of ingredients for the stock-making activity.

The following Activity Plans are to be completed prior to this Activity Plan:

* Introductory Knife Skills
* Workstation Set-up
* Recipe Comprehension

## Safety Considerations

* Ensure the use of required personal protective equipment.
* Ensure safe operation of stoves and equipment.



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## Terminology

**acid products**: Acid products include ingredients such as lemon juice, vinegar, or tomato. These products speed coagulation in protein and aid in dissolution of connective tissue.

**bones**: Bones refer to the skeletal system of an animal.

**boil**: To boil is to cook foods quickly in rapidly boiling water (or another liquid) at 100°C (212°F)

***bouquet garni***: A *bouquet garni* (Fr.) is a mixture of fresh herbs and other aromatics, tied in a bundle and used for flavouring.

**meat**: Meat is the edible flesh of an animal, fruit, or nut.

***mirepoix***: *Mirepoix* (Fr.) is a mixture of diced/chopped onions, carrots, and celery used for flavouring.

**sachet**: A sachet is a mixture of herbs and spices tied in a cheesecloth bag. The bundle is tied to the handle of the stockpot to make it easy to remove.

**stock**: Stock is a liquid made by boiling meat, vegetables, fish, or other food. It is used as a base for making soups, sauces, etc.

## Estimated Time

2 60–75-minute classes

## Recommended Number of Students

Up to 24

## Facilities

Home Economics teaching lab and/or Culinary Arts teaching kitchen

## Tools

* + large stockpot
  + chef’s knife
  + paring knife
  + cutting board
  + measuring cups

## Materials

* bones
* *mirepoix* (carrots, onion, celery)
* seasonings
* cheesecloth

## Resources

Draz, John, and Christopher Koetke. *The Culinary Professional*. 3rd ed. Goodheart-Willcox, 2017. Pages 414–454.

Gisslen, Wayne. *Professional Cooking for Canadian Chefs*. 8th ed. John Wiley & Sons, Inc., 2014. Hoboken, New Jersey

# Demonstrating Skills And Knowledge

## Procedure

### Day 1: Teacher-led Activity

1. The teacher will lead a class discussion on the key ingredients used in making of beef, chicken, fish, and vegetable stocks, covering each of the terms listed in the terminology section.
2. The teacher will discuss the types of bones used in specific stocks as well as the difference between white and brown stock.
3. The teacher will discuss mirepoix and the ratio required in standard mirepoix.
4. The teacher will discuss the importance of seasonings and spices and their use in stock making. The teacher will compare a sachet and a bouquet garni.
5. The teacher will discuss the proportions of 50% bones, 10% mirepoix, and 100% water, and explain how to measure each of the ingredients.
6. The teacher will guide the students in creating a class list of equipment and ingredients required for making chicken stock from a standardized recipe, including the correct measurements and conversions required.

### Day 2: Student-led Activity

1. The class will review the list of ingredients and equipment required for making the chicken and/or vegetable stock.
2. The students will gather all of the ingredients and equipment required.
3. The students will chop the mirepoix as required.
4. The students will rinse the chicken bones in cold water.
5. The students will place the bones in a large stockpot and add cold water to completely cover the bones.
6. The students will bring the water to a boil, and then reduce the heat so that the stock is simmering. The students will skim the scum using a skimmer or perforated spoon.
7. The students will add the mirepoix and seasonings to the stockpot.
8. The students will allow the stock to continue to simmer as they continue to skim.
9. The students will clean and sanitize the working area.

**Recommended time for making stock with chicken bones is 3–4 hours. The instructor will be required to cool and store the stock following completion of the activity.**

## Evaluation Guidelines

Students will be evaluated on:

* participation and effort in the stock-making activity
* teamwork and cooperation while participating in a group activity, and
* following safe food handling and sanitation practices in the kitchen lab.

## Extension Activities

Students may be given the opportunity to:

* create other stocks such as beef, vegetable, or fish
* strain, vent, and store the stock, and
* compare and contrast the stock made from scratch to a stock made from a commercial base.

Stock

Cook