Cooking Meat and Poultry

Description
Students will identify and apply the proper procedures for cooking meat and poultry, and the reasons for choosing dry-heat, moist heat, or combination cooking methods. They will be able to identify degree of doneness, internal temperature, and carry-over cooking.

Lesson Objectives
Students will be able to:
- describe potential risks and safety concerns when cooking meat and poultry
- name the different degrees of doneness
- construct a dish highlighting meat and/or poultry
- identify the cooking method used, and
- demonstrate correct safety procedures and techniques.

Assumptions
- Students have received orientation on the subject of kitchen and food safety.
- Workstation Set-up and Knife Skills Activity Plans will have been successfully previously completed.
- The teacher will be familiar with correct meat cookery procedures using appropriate resources.
- The teacher has demonstrated the dish to be prepared and all students have a copy of the recipe.
- The teacher will have the flexibility to choose their recipe(s) based on resources, time, and physical space.

Safety Considerations
Students will practise proper use of personal protective equipment (PPE) at all times.
Terminology

carry-over cooking: Meats and poultry will continue to cook after they are removed from their heat source; this is referred to as carry-over cooking. Typically, the internal temperature will rise 5°C during this period.

collagen: Collagen is the main structural protein found in soft connective tissues. When collagen is heated to 71°C, it turns into gelatin, which is then dissolved into the liquid, resulting in much more flavour.

connective tissue: Connective tissue is the fibrous tissue that surrounds muscles. Some connective tissue can become tender with cooking; other forms such as silver skin cannot and must be removed.

cutlet: A cutlet is a portion of meat or poultry that has been breaded and fried.

elastin: Elastin is the connective tissue that makes up silver skin and tendons.

fork test: Fork test refers to inserting a fork into a food to test its resistance. If little resistance is encountered with meat and poultry, then the product is tender and the connective tissues have been broken down or dissolved.

internal temperature: Internal temperature refers to the temperature of a cooked food at its core.

marbling: Marbling refers to the streaky fat on the inside of a muscle.

medium rare: A food is medium rare when it is cooked to an internal temperature of 55°C.

quality grading: Quality grading refers to the grade that is put on all meats and poultry based on factors such as their physical appearance, the amount of fat, etc.

rare: A food is considered rare when it is cooked to an internal temperature of 50°C.

resting: Resting refers to allowing meat and poultry to sit away from any heat source, to allow natural juices to be reabsorbed into the meat before cutting.

sear: To sear is the process of caramelizing the outside of meats and poultry before the start of the cooking process.

silver skin: Silver skin is white, silvery connective tissue found on various types of muscle.

steak: A steak is a portion of meat containing high-quality protein.

truss: To truss is the act of tying poultry to encourage even cooking.

well done: A food is well done when it is cooked to an internal temperature of 74°C.

Estimated Time
1–2 70-minute classes

Recommended Number of Students
Up to 24
Facilities
Home Economics teaching lab and/or Culinary Arts teaching kitchen

Tools
Tools that pertain to the chosen recipe

Resources


Canada Beef website (for information and recipes/videos):
https://CanadaBeef.ca
Demonstrating Skills And Knowledge

Procedure

Day 1
The teacher will introduce the class to a lesson highlighting meat and poultry cookery. This may be done using a teacher-led demonstration or in combination with another activity. The teacher should select only one topic to explain and demonstrate per class.

Day 2
1. Students will use their recipes and create the demonstrated dish(es) highlighting a specific cooking method as per the instructions of the teacher. Students may all make the same dish(es), or the teacher may assign various recipes to different groups.
2. Continuing lessons must be acknowledged and identified throughout the teacher demonstration and student lab, such as kitchen, food, and knife safety; cooking methods; and knife skills.
3. As students are cooking, the teacher will observe and assist when necessary.
4. As students complete the dish, they will present to the teacher for assessment before consuming or packaging their final product.

Evaluation Guidelines
If only teaching meat and poultry cookery as theory, a summative and/or formative assessment will be evaluated on meat and poultry cookery theory.

For the lab, students will be formative assessment on:

- positive participation in lab
- observational assessment during the lab, and
- final product meets outlined and demonstrated standards.

Extension Activities
This activity can be adapted in the following ways:

- International cooking—select and prepare a protein found in a particular culture.
- Aboriginal cooking—cooking bison, wild game.
- Identify local agriculture—use demonstrations and discussions from the BC poultry industry and the Alberta/BC beef industry.
- This activity plan can complement other activity plans through overlap between the use of moist, dry, and combination cooking methods.
- Nutritional information