Poultry

Unit: Preparing Foods

Problem Area: Meat, Poultry, and Seafood

Lesson: Poultry

Student Learning Objectives.

Instruction in this lesson should result in students achieving the following objectives:

1. **Differentiate between types, cuts, and grades of poultry.**
2. **Practice the safe handling of poultry during storage, cooking, holding, and keeping.**

Resources.

The following resources may be useful in teaching this lesson:

E-unit(s) corresponding to this lesson plan. CAERT, Inc. http://www.mycaert.com.

"ACF Poultry Fabrication Part 1," *YouTube.* Accessed Jan. 14, 2013. http://www.youtube.com/watch?v=o7i_nTVtVWM.

"ACF Poultry Fabrication Part 2," *YouTube.* Accessed Jan. 14, 2013. http://www.youtube.com/watch?v=o0pxfRo97QY.

Ekarius, Carol. *Storey's Illustrated Guide to Poultry Breeds*. Storey, 2007.

Gisslen, Wayne. *Professional Cooking*, 7th ed. Wiley, 2010.

"Inspection & Grading of Meat and Poultry: What Are the Differences?" *USDA: Food Safety and Inspection Service*. Accessed Jan. 14, 2013. http://www.fsis.usda.gov/Factsheets/Inspection_&_Grading/index.asp.

Schneller, Thomas. *The Kitchen Pro Series: Guide to Poultry Identification, Fabrication, and Utilization*. Delmar Cengage Learning, 2009.

Equipment, Tools, Supplies, and Facilities

- ✓ Overhead or PowerPoint projector
- ✓ Visual(s) from accompanying master(s)
- ✓ Copies of sample test, lab sheet(s), and/or other items designed for duplication
- ✓ Materials listed on duplicated items
- ✓ Computers with printers and Internet access
- ✓ Classroom resource and reference materials

Key Terms. The following terms are presented in this lesson (shown in bold italics):

- broilers and fryers
- carving
- chicken
- cross-contamination
- dark meat
- domesticated
- dry cooking methods
- eviscerate
- fabrication
- fowl
- free-range
- game birds
- giblets
- gizzards
- moist cooking methods
- opaque
- organic
- poultry
- quality grades
- resting
- Rock Cornish game hens
- salmonella
- squab
- stewing
- temperature danger zone
- translucent
- trussing
- USDA
- white meat
- wholesomeness

Interest Approach. Use an interest approach that will prepare the students for the lesson. Teachers often develop approaches for their unique class and student situations. A possible approach is included here.

> *Ask students to list the foods commonly found in the dairy case. They will begin to list milk, cream, eggs, cheese, butter, etc. After allowing them to write for three minutes, ask: "Everything in the dairy case IS dairy, correct?" Most students will think, pause, and agree. Then ask them to name the source of the eggs. Remind them, if necessary, that eggs are poultry.*

> *Ask them if ostrich eggs and quail eggs are poultry. Then ask them to define poultry (in their own word on their paper). Next, ask if all poultry is edible. Does it all taste like chicken?*

> *If you have a working kitchen and a budget for demonstrations, consider assembling various types of poultry for a quick Identification Test. A sample list of poultry for student ID would include turkey, goose, duck, capon, roasting chicken, stewing chicken, Rock Cornish game hen, and squab. This list provides a range of size, weight, and meat color.*

CONTENT SUMMARY AND TEACHING STRATEGIES

Objective 1: Differentiate between types, cuts, and grades of poultry.

Anticipated Problem: What are the common types, cuts, and grades of poultry?

I. Types, cuts, and grades

A. Types

1. ***Poultry*** is any domesticated fowl raised for meat or eggs. ***Fowl*** are typically hens, but the word "fowl" is also a generic descriptor of all domesticated and game birds. ***Domesticated*** is any poultry that are farm-raised or otherwise handled by humans for the purpose of harvesting for food. The most common types of poultry are chicken, turkey, duckling, and geese. A broader definition of poultry includes any animal with wings. Poultry includes all birds, such as:
   a. Pheasant
   b. Quail
   c. ***Squab*** (pigeon; a very expensive choice)
   d. Ostrich

e. ***Rock Cornish game hens*** (very small, plump birds that are a hybrid between a Plymouth Rock and a Cornish chicken)

2. Domesticated birds are generally milder in flavor than game birds because of control of the birds' food supply and limited movement. The more exercise the bird gets, the more its muscles develop, resulting in tougher and stronger tasting meat. Domesticated birds include:
   a. ***Chicken*** (in French, *poulets*, *poulardes*, *volaille*) is a generic term for barnyard fowl that runs the gamut from young tender chickens (in French, *poussin*) to tougher stewing hens.
   b. Chicken and turkey have the mildest flavors; domesticated ducks and geese are a bit stronger; and wild ducks and geese are considerably stronger yet in taste and texture.
3. Domesticated types of poultry from largest to smallest:
   a. Turkey—hens and toms (5 to 25 pounds)
   b. Goose (6 to 14 pounds)
   c. Duck and duckling (up to 16 weeks old) (4 to 5 pounds)
   d. Capon (6 to 9 pounds)
   e. Roasting chicken (4 to 7 pounds)
   f. Stewing chicken (3 to 7 pounds)
   g. Rock Cornish game hen (1 to 2 pounds)
   h. Squab (¾ to 1 pound)
4. ***Game birds*** are wild birds or non-domesticated birds (e.g., pheasant, quail, grouse, and squab) caught in the wild and not farmed. Wild ducks and geese are considered "game birds" as a way to identify them as non-farm raised. They are hunted and harvested for sport and food.
   a. An advantage of eating wild birds is that they have eaten a natural diet, without any antibiotics or hormone drugs. The flavor of the flesh is "pure," and eating them passes on no chemicals in contrast to farm-raised birds.
   b. The downside is that game birds are less available and are more expensive.
5. ***Free-range*** are birds allowed to roam and eat whatever they find naturally, as opposed to caged birds that are fed bird feed. Free-range birds provide meat on a quality par with wild birds. They are a popular variation of farm-raised birds because they are in captivity.
6. ***Organic*** are farm-raised birds that are not fed any artificial feeds, antibiotics, or growth hormones. These birds are harder to raise and to keep healthy, often resulting in smaller weight, higher mortality, and high costs. Some consumers are willing to pay these costs for meat considered "purer" than farm-raised varieties.

B. Cuts

1. After the slaughter of poultry, the processing involves the removal of the feet, neck, head, feathers, and internal organs. Whole processed birds typically contain a packet of pieces—neck, giblets, and gizzard—in the bird's chest cavity.
   a. ***Giblets*** are a grouping of organs that usually include the heart, liver, and gizzard.
   b. ***Gizzards*** are a "second or third stomach" in most domestic birds that are quite muscular and tough, as they help with digestion.
   c. The neck, back, wing tips, and other bits of skin and carcass (plus aromatic vegetables and spices) are typically saved and used to prepare a white stock.
2. ***Fabrication*** is the process of butchering the bird into pieces, along with any further processing (e.g., removal of the skin and/or bones). After processing, regardless of the bird variety, they are all comprised of two identical halves. Each half is comprised of four standard pieces of meat or eight standard "restaurant cuts" per bird: two breasts, two thighs, two legs, and two wings. These eight pieces may be cut into even smaller pieces (e.g., for stir-frying and chicken tenders) and are examples of further fabrication.
3. Chickens and turkeys are the only poultry sources of ***white meat*** or flesh that are pinkish pale when raw and white when cooked. These two birds do not fly, so the breast and wing muscles do not get much work. As a result, they stay pale in color and delicate in flavor. Also, they are lower in fat than dark meat. Breasts and wings are white meat. Conversely, the birds' legs and thighs do more work and have more muscle fiber than the wings and breasts. ***Dark meat*** (e.g., legs and thighs) is the portion of the chicken or turkey that is darker pinkish red when raw and turns dark grey when cooked. Dark meat is stronger in flavor, tougher in texture, and contains more fat. All other poultry has only dark meat. Typical restaurant servings of chicken are:
   a. A half (one breast, one wing, one thigh, and one leg)
   b. A quarter (either one breast and wing or one leg and thigh)
   c. A white meat quarter (breast and wing)
   d. A dark meat quarter (leg and thigh)

C. Grades

1. The United States Department of Agriculture (***USDA***) is an organization that grades all commercially processed poultry. The grading is for food product ***wholesomeness*** (the health and vigor of the bird, the shape, flesh, and appearance) and for the lack of microbial infection and chemical contamination. Poultry that passes inspection is literally stamped with ink that reads "Inspected for Wholesomeness by the U.S. Department of Agriculture." The grading is singular; the animal passes inspection or it does not.
2. All poultry sold in interstate commerce must be eviscerated. To ***eviscerate*** is to remove the entrails, head, and feet. Poultry sold within a state is graded and inspected on a voluntary basis, and plants must pay for their meat to be graded. This type of grading is for quality evaluation of the bird shape, the

meatiness, and freedom from physical defects. The USDA Agricultural Marketing Service is the agency that conducts quality grading for producers. NOTE: It is recommended that eviscerated poultry be cleaned of all traces of blood by soaking in cold water and drying as necessary before cooking.

3. ***Quality grades*** for poultry are U.S. Grade A, U.S. Grade B, and U.S. Grade C. The grade stamp is in the shape of a "shield" with a large A, B, or C in the middle, with USDA in small letters above and "GRADE" in small letters below.
   a. Grade A is the highest quality, indicating the bird is free from bruises, defects, discolorations, feathers, and broken bones. Grade A is the standard for poultry sold by retailers.
   b. Grade B and Grade C poultry are typically sold after further processing, such as smaller pieces, canned, ground, or incorporated into other processed foods. Typically, these two poultry grades are not sold whole and do not bear visible grade labels.
   c. Other grade classifications that affect tenderness are:
      (1) Sex
      (2) Weight
      (3) Age

Teaching Strategy: *In addition to lecture, use VM–A, VM–B, and VM–C to aid in a discussion.*

Objective 2:

Practice the safe handling of poultry during storage, cooking, holding, and keeping.

Anticipated Problem: How can poultry be handled safely?

II. Safe storage and handling

A. Storage

1. All poultry is considered highly perishable and potentially hazardous due to the likelihood of bacterial contamination, specifically from ingesting ***salmonella*** (pronounced sal-meh-nella; a disease-causing microbe that can cause a salmonellosis infection). Temperatures between 41°F and 135°F are considered the ***temperature danger zone***, a temperature range in which bacteria grow best. Foods considered potentially hazardous must be kept out of this temperature range as much as possible, limiting exposure to a total of no more than four hours. Controlling the growth and development of this bacterium is critical in preventing foodborne illness, and proper storage is the first control step.
   a. Fresh poultry must be stored below 41°F and is best stored on crushed ice if storage will extend beyond several days.
   b. Poultry must be frozen if it will be stored longer than several days before cooking.

c. Poultry must be stored in the coldest part of the refrigerator (away from the door). To prevent cross-contamination, poultry must be kept on a bottom shelf where its blood or juices have no opportunity to drip onto other foods.
d. Whole birds should not be stored with stuffing in their body cavity (which acts as insulation from heat and cold) because of the likelihood of bacterial growth.
e. According to the National Institute for the Foodservice Industry (NIFI), ***cross-contamination*** is "the transfer of harmful micro-organisms from one food to another by means of a non-food surface, such as utensils, equipment, or human hands."
    (1) Salmonella bacteria are frequently present in raw poultry, so a person must not use the same utensils or cutting boards for raw and cooked poultry without cleaning and sanitizing the tools and equipment between uses. Separate cutting boards for raw and cooked poultry are recommended.
    (2) Personal hygiene should be practiced. Frequent and thorough hand washing after handling raw or cooked foods or after using the restroom is mandatory.
    (3) Food should be cooked adequately, and it should be chilled promptly.

2. Frozen poultry must be thawed over several days under refrigeration or in a sink under cold running water. If poultry is thawed in a microwave, the cooking process must immediately continue in another cooking method—boiling, baking, roasting, grilling, etc. because of the nature of microwave heating. A large turkey could take two days to thaw under refrigeration.

B. Cooking temperatures and doneness

1. The thickest part of the flesh, away from bone, must reach a minimum internal temperature of 165°F to guarantee bacterial safety, regardless of the poultry type. A meat thermometer, a stem-type probe thermometer, and/or a digital thermometer must be used to get an accurate reading of the internal temperature of the flesh. The outside color of the bird has little bearing on the doneness of the meat.
2. ***Resting*** is the period of time during which the internal temperature of the bird continues to rise, and its juices are reabsorbed into the meat prior to carving and slicing. Larger birds (e.g., turkeys, geese, and roasting chickens) have considerable body mass and continue to cook for several minutes after removal from the cooking source. As a result, they can be cooked to an internal temperature of 155°F and then covered with foil and left at room temperature for 15 or 20 minutes to reach 165°F. Resting for 15 to 20 minutes also facilitates easier carving. Resting is not required or particularly useful with individual pieces of meat or smaller birds.
3. Poultry is fully cooked when the juices of the bird run clear as the flesh is pierced. Pink or cloudy juices indicate that the meat is undercooked.
4. Poultry flesh that has firmed significantly and changed in color from its raw ***translucent*** (light passes through) state of pink/red coloring to an opaque

white or gray-reddish brown coloring is an indication that the meat is fully cooked. ***Opaque*** is cloudy; light does not pass through.

5. Pressing the drumstick flesh is another good indicator of doneness; cooked poultry loses its soft, raw feel and becomes firm but yields easily. NOTE: Over-cooking makes poultry dry and stringy.

C. Cooking techniques

1. French gastronome Jean Anthelme Brillat-Savarin said, "Poultry is for the cook what canvas is to the painter. It is served to us boiled, roasted, fried, hot or cold, whole or in pieces, with or without sauce, boned, skinned, stuffed, and always with equal success." Poultry's generally mild flavor and tenderness allows for a large variety of cooking methods and is a natural choice for young cooks who wish to be creative by experimenting with flavors and techniques. Common around the world, virtually every culture has unique ways to prepare and serve poultry. International cooking techniques vary from mild to spicy; from whole to pieces; bone-in to boneless; chopped; minced; breaded; or battered. Poultry is combined with other meats and with endless numbers of spices, vegetables, and starches. It is used for sandwiches or roll-ups, entrées, appetizers, soups, stews, and on and on. Poultry, especially turkey and chicken, is processed with spices and binding agents to turn it into other "look alike" products (e.g., ham, salami, and hot dogs).
2. Young birds are very tender and can be cooked using ***dry cooking methods***, which are cooking techniques used with tender cuts that have little connective tissue; quick, hot cooking methods. Dry heat cooking methods include roasting, baking, frying, broiling, stir-frying, sautéing, barbequing, and grilling. Young chickens are known as ***broilers and fryers*** (specific terms that relate to a young age and tenderness, making them appropriate for dry heat methods). Packaging for turkeys, ducklings, and geese typically include the word "young" to stress tenderness. For example, ducks have tough flesh, and ducklings have tender meat with a high fat content; ducklings can be roasted.
3. ***Moist cooking methods*** are techniques used for meats with more connective tissue and involve long, slow cooking. Moist cooking options are suggested for older and tougher birds and include boiling, ***stewing*** (cooking in liquid or sauce with vegetables), braising, simmering, poaching, and steaming. Most game birds benefit from long, moist cooking methods, as they tend to be tougher than domesticated poultry. Dry cooking methods do not tenderize older tougher meat.
4. ***Trussing*** is a technique to help maintain shape and ensure even roasting (or simmering) by tying a whole bird together using a trussing needle and strong string. Tell your students the steps for trussing a bird.
   a. Remove the wishbone. (To make carving the breast meat easier)
   b. Stuff the bird (optional).
   c. Close the tail vent.
   d. Secure the wings (akimbo).
   e. Secure the drumsticks.

f. Tie the first knot at the neck.
g. Secure the wing joints.
h. Secure the drumstick ends.

5. ***Carving*** is cutting up the cooked poultry meat to serve at the table. A good knowledge of anatomy is essential if a person is to carve well, whether in the kitchen or at the table. A pointed knife with a very sharp edge and a long, flexible blade is essential. The knife must be heavy enough to easily cut through a joint, with enough "bend" to follow the bird contours. To control the carving, a two-tined fork or a pair of tongs can hold the bird in place while carving.

D. Holding, reheating, and keeping

1. Holding—Poultry is a potentially hazardous meat product. Once cooked, it must be held hot at a minimum internal temperature of 140°F. This may be accomplished by using heated "hot boxes," placing under a heat lamp, heating on a stovetop, or placing in warming drawers or in ovens. Poultry that is fried crispy would typically be held in an open hot environment (e.g., under heat lamps) to prevent steam from moistening the crispy outside. Conversely, tender roasted or stewed poultry is best kept warm by covering it and then placing it in a sealed warming unit to retain moisture.
2. Reheating—To safely reheat poultry, the requirements are strict. It must reach an internal temperature of 165°F quickly to reduce bacteria formation. It can then be kept at 140°F internally for hot holding. As with all potentially hazardous foods, poultry can safely be reheated one time, after which it should be discarded.
3. Keeping—Leftover cooked poultry must be cooled to 70°F within two hours and then to below 41°F within four hours or less. Large birds—turkey, geese, and capon—should be cut up and/or sliced to ensure the meat cools within the required time frame. Thick poultry products—stews, soups, and casseroles—should be placed in enough shallow hotel pans or dishes to ensure they cool within the prescribed time frame.

Teaching Strategy: *In addition to lecture, demonstrate trussing a bird and carving a bird. Students would take their own notes on the steps to truss and carve a bird. Encourage students to practice trussing and carving at any opportunity, even if the resulting use of the poultry is not for a dinner presentation (perhaps chicken salad or chicken soup). Share your favorite poultry dishes, and ask students to determine which are dry heat and which are moist heat methods. Use VM–D through VM–G. Assign LS–A and LS–B.*

Review/Summary. Use the student learning objectives to summarize the lesson. Have students explain the content associated with each objective. Student responses can be used in determining which objectives need to be reviewed or taught from a different angle. If a textbook is being used, questions at the ends of chapters may be included in the Review/Summary.

Application. Use the included visual master(s) and lab sheet(s) to apply the information presented in the lesson.

Evaluation. Evaluation should focus on student achievement of the objectives for the lesson. Various techniques can be used, such as student performance on the application activities. A sample written test is provided.

Answers to Sample Test:

Part One: Completion

1. fryers (or broilers)
2. white meat
3. USDA
4. game birds
5. opaque
6. stewing
7. trussing

Part Two: Multiple Choice

1. c
2. b
3. c
4. a
5. d
6. d

Part Three: True/False

1. F
2. F
3. F
4. F
5. F
6. T

Sample Test

Name _____

Poultry

Part One: Completion

Instructions: **Provide the word or words to complete the following statements.**

1. Young chickens are commonly called _____.
2. Of all poultry, just chicken and turkey have _____.
3. The _____ is responsible for controlling the required federal grading of poultry.
4. Wild forms of poultry are typically called _____.
5. When poultry is raw, it looks translucent. When properly cooked, it looks _____.
6. When the poultry is an older, tougher bird, the label usually uses the term _____ to indicate how the bird should be cooked.
7. A technique to help maintain shape and ensure even roasting (or simmering) by tying a whole bird together using a needle and strong string is called _____.

Part Two: Multiple Choice

Instructions: **Circle the letter of the correct answer.**

1. Farm-raised chickens allowed to roam and eat what they can find are called _____.

   a. organic
   b. wild
   c. free-range
   d. squab

2. Active birds that fly and move freely have tougher meat and would best be cooked using any of these methods *except* _____.

   a. stewing
   b. pan frying
   c. moist cooking methods
   d. boiling

3. Poultry must be cooked to a minimal internal temperature of _____ to ensure safe eating.

   a. 145°F
   b. 155°F
   c. 165°F
   d. 185°F

4. This "little chicken," _____, is plump and tender and is a hybrid of two other birds.

   a. Rock Cornish game hen
   b. pigeon
   c. quail
   d. pheasant

5. Chicken fabricated for restaurant service is typically cut into _____ pieces.

   a. two
   b. four
   c. six
   d. eight

6. To determine doneness of poultry, you should check that _____.

   a. the minimum internal temperature is 165°F
   b. juices run clear
   c. the flesh feels firm
   d. All of the above

Part Three: True/False

Instructions: **Write *T* for true or *F* for false.**

_____1. A squab is a pheasant.
_____2. Fresh poultry must be stored at or below 54°F to ensure safety.
_____3. Gizzards are the liver and heart.
_____4. Domesticated poultry is not ever infected with salmonella.
_____5. USDA Grade B is the lowest quality of poultry.
_____6. The federal government requires poultry to be graded for quality.

POULTRY TYPES

Poultry is a large category of meat. If it has wings, it is probably poultry.

POULTRY CUTS

All poultry has two halves. Each half has four pieces: breast, wing, thigh, and drumstick. Only turkey and chicken have white meat. Which pieces are white meat?

POULTRY CUTS: GIBLETS AND GIZZARDS

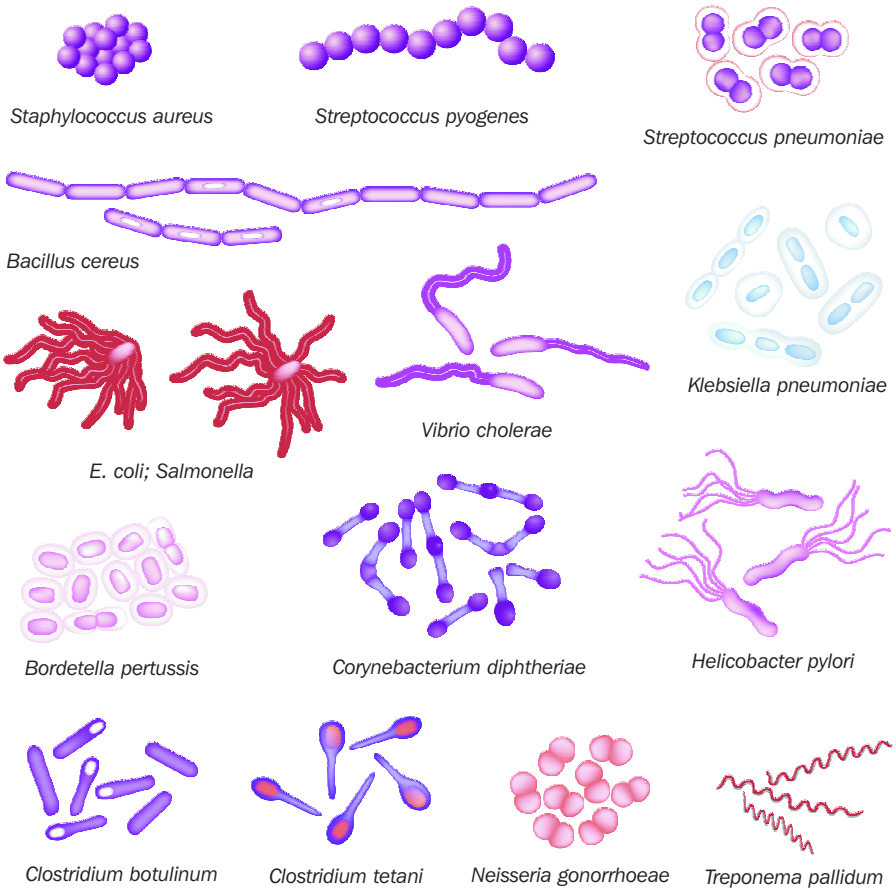
Hearts are a type of giblet.

A gizzard is a tough, fibrous stomach-like muscle used in digestion.

SAFE HANDLING OF POULTRY

All of these bacteria grow in food. Salmonella is the bacteria most associated with poultry. To prevent bacterial infections and poisonings:

- Prevent cross-contamination.
- Thaw poultry under refrigeration.
- Test for doneness.
- Keep cold food cold (below 41°F).
- Keep hot food hot (165°F internal).
- Quickly chill or reheat cooked poultry.



TRANSLUCENT VS. OPAQUE

Raw poultry is pinkish translucent;
cooked poultry is opaque.

DRY COOKING METHODS

China's most famous dish is Peking Duck (actually duckling). Notice the crispy skin that covers very moist dark meat. Young poultry is suitable for dry heat cooking (e.g., roasting, grilling, and frying).

Buffalo chicken wings are cooked by deep-frying (a dry cooking method) and then are coated with a spicy sauce and served with blue cheese dip.

MOIST COOKING METHODS

Older, tougher birds are best suited for moist cooking methods (e.g., stewing). The French make a wonderfully fragrant chicken stew called Coq au Vin (pronounced coke-o-van) or chicken with wine.

Cassoulet (casserole) is a classic French braised chicken, duck, and pork dish cooked with beans, mushrooms, carrots, and several spices. Cassoulet is a dish that requires long, slow cooking and is often best served the "next day."

LS–A

Name _____

Poultry Review

Purpose

The purpose of this activity is to review poultry terminology and techniques.

Objectives

1. Define poultry terminology in your own words.
2. Demonstrate a working knowledge of safe food handling related to poultry.
3. Demonstrate knowledge of poultry fabrication and cooking techniques.
4. Participate in a class discussion of poultry terms, handling, and techniques.

Materials

- writing utensil
- textbook and other reference books
- class notes
- computer with Internet access

Procedure

1. Work independently. Review your class notes about poultry. Research answers using your textbook, notes, reference books, and/or the Internet.
2. In the space provided, write one or two sentences to answer each of the following questions related to the safe handling and cooking of poultry.

   a. What is the difference between “free range” and “organic” poultry?

b. Why are young chickens commonly called “fryers?”

c. What is a Rock Cornish game hen? Describe.

d. What is the difference between giblets and gizzards?

e. What does “fabrication” have to do with poultry? Give an example.

f. Define the term “poultry” in your own words.

g. In your own words, describe the difference between “domesticated poultry” and “game birds.”

h. Describe the quality standard for poultry enforced by the USDA.

i. How is white meat different from dark meat? List two specific differences, and explain why white meat is not found on game birds.

j. List three dry cooking methods appropriate for turkey. Explain why you chose each method.

k. List two moist cooking methods appropriate for wild duck. Explain why you chose each method.

l. Explain why salmonella is a concern when working with poultry and when considering the temperature danger zone. Explain two things you can do to prevent its growth or to kill it before people consume it.

3. Participate in a class discussion of the answers to each of the questions.
4. Turn in your completed lab sheet to your instructor.

Poultry Review

2a. Free-range poultry roams freely (is not caged) and eats whatever it finds. Organic poultry has been given no artificial food and no chemicals of any kind, including antibiotics and hormones.

2b. Young chickens are called “fryers” because they are quite tender and are suitable for frying and other dry cooking methods that will not tenderize the meat during the cooking process.

2c. Rock Cornish game hen is a tiny and plump bird that is a hybrid of a Plymouth Rock and a Cornish chicken.

2d. Giblets are the liver and heart; sometimes the kidneys and neck bones of poultry are considered giblets. Gizzards are tough digestive organs, similar to a second stomach, designed for digesting hard matter that birds may eat.

2e. Fabrication is the butchering and further processing of poultry (or any natural whole food). Whole birds that are cooked are not fabricated beyond the removal of the organs, neck, feet, etc. Birds that are cut into pieces, however, have skin removed, etc. and are termed “fabricated.” This type of fabrication includes the cutting of whole pieces into yet smaller pieces for stir-frying and chicken tenders.

2f. Poultry is any domesticated fowl (poultry that are farm-raised or otherwise handled by humans for the purpose of harvesting them for food) raised for meat or eggs. There is a broader definition: any animal with feathers is usually poultry.

2g. Domesticated poultry are grown and held in captivity for the purpose of harvesting them for food. Game birds are wild animals that are hunted and harvested for sport or food.

2h. The USDA mandates quality standards for wholesomeness, the health of the animal, and bacterial and chemical safety of the meat. The animal gets a stamp of approval if it passes. This should not be confused with voluntary grading for quality, which is offered from the USDA Agricultural Marketing Service. Those grades are A, B, and C, based on lack of bruises, defects, color, feathers, broken bones, etc.

2i. White meat is a result of muscles that are seldom used, found only in chickens and turkeys (largely due to the fact that they do not fly). White meat is more tender than dark meat, milder in flavor, lower in fat, and lower in cholesterol.

2j. Turkey is a tender bird, so any dry cooking method works well, including frying, sautéing, roasting, baking, grilling, and barbequing. The bird does not have to be cooked whole, making the meat viable for any dry cooking method.

2k. Wild duck has a tougher flesh than duckling and would best be cooked using a moist method—any moist method. Stewing and braising would be excellent choices because they add considerable flavor. However, boiling, steaming, and poaching would work.

2l. Salmonella is a bacterium that potentially affects all forms of poultry; it can manifest as the disease Salmonellosis. Its growth is controlled by temperature, such as keeping the bird under 41°F for a limited number of days or freezing it. Birds in the temperature danger zone (41°F to 135°F) allow the growth of bacteria to flourish. Cooking to a minimum internal temperature of 165°F kills the bacteria, making the poultry safe to eat. Cooked meat must be maintained at a minimum internal temperature of 140°F to remain safe to eat after cooking; this is called holding. In keeping, cooling poultry to below 41°F within six hours total keeps the bacterial growth under control. Poultry may be reheated once to a minimum internal temperature of 165°F. Then the foodstuff must be discarded.

Name _____

Research Paper: Poultry is an International Cuisine

Purpose

The purpose of this activity is to use your research skills to compare poultry use and processing from other countries to the U.S. standards.

Objectives

1. Select a country to research.
2. Compare and contrast the country's poultry usage to that of the United States.
3. Evaluate written information through research.
4. Use appropriate writing skills to explain and defend a point of view.
5. Present your research orally, and use appropriate media or technology to enhance your presentation.

Materials

- computer with Internet access and word processing software
- textbook and other reference materials

Procedure

1. Work independently or in pairs. Use the Internet and reference books to research your paper. You do not need to state that one country's approach is better than the other; just explain the commonalities and the differences between your country and the United States based on evidence. The rubric for your paper is:

   a. One to two typewritten pages that answer each of the required questions.

b. Following writing conventions:
   (1) Spelling
   (2) Grammar
   (3) Sentence and paragraph structure
c. Prepared in anticipation of a three-minute oral presentation.
d. Other: (as determined by your instructor)

2. Poultry is a common food source for many cuisines around the world. However, different countries use different types of poultry, fabricated in different ways. In addition, they cook and present poultry in different ways than we do. Your task is to choose a country and research its history of poultry dishes. Below are the specific points to research as you learn about the cultural use of poultry in the country of your choice:

   a. What is the name of your country? Where is it located? What caused you to select this country?
   b. What is the most common or prevalent (widespread) form of poultry eaten? Is the most common poultry domestic or wild game?
   c. What are two of the most classic poultry dishes of this cuisine?
   d. How is the poultry fabricated for those dishes?
   e. What cooking method (dry or moist) is used to cook each dish? What is the actual style of cooking called for in the recipe? (e.g., pan-fried, broiled, or braised)
   f. What are the storage suggestions for poultry prior to cooking? How does a cook determine doneness in each recipe? If there are several means to determine doneness, describe them. If temperature is not a method to determine doneness, describe how you would feel about eating in that culture. Is it safe?
   g. Does the country of origin for your recipe have a "grading" system for poultry? If so, describe it. If not, what do you think about that?

3. Consider the information you learned in your research about poultry (e.g., how it is processed, fabricated, stored, and cooked).

   a. Compare your country-specific research to the content of this lesson. Assess any differences you find, and explain why you think that country differs in its approach to common use and processing of poultry.
   b. Chicken is the most common poultry used in the United States. What is the most common poultry used in the cuisine you studied?
   c. In what ways is the cooking style the same, and how is it different from the style used in the United States? Compare and contrast storage guidelines.

4. Prepare your three-minute oral presentation. Add any appropriate media or technology to enhance your presentation.

5. Turn in your completed research paper to your instructor.