

LESSON 2 – WHY INCLUDE CHICKEN IN YOUR DIET

Time Needed

- 30-45 minutes depending on skill level

Skill/Grade Level

- Grades 3-5

Core Area

- Family and Consumer Sciences

Life Skills

- Critical Thinking
- Decision making
- Disease prevention
- Healthy lifestyle choices

Educational Standards

- Health Education 3.1.2, 4.1.2, and 5.1.2



Objectives

Through this lesson of the Kentucky Farm to School Curriculum related to chicken, participants will:

- Learn** about the value of having chicken on the menu, regardless of culture (except vegetarians, of course)
- Be able to **Explain** the benefits of healthy eating habits

Introduction to Content

This lesson builds on lesson one. Once the youth have a clear understanding of the need for protein in our diet, we move on to one particular type of protein – chicken meat. Chicken is an easily digested, highly nutritious, and economical source of protein. Chicken can be used in many different tasty dishes because of its versatility. In addition, chicken is one of the few meat proteins that has no religious taboos against its consumption (Jewish/Muslim restrictions against pork and other meats; Hindu restrictions against Beef).

Background Information

All animals need food to live and grow. They obtain their food from plants or other animals.

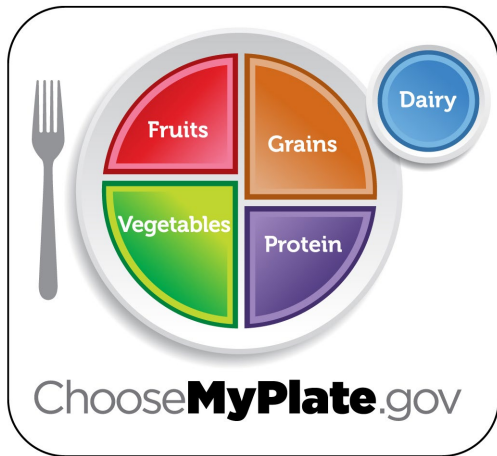
There are MANY different types of protein, and we should include a variety of different protein sources in our diet. The main role of dietary protein is to supply the amino acids, or building blocks, necessary to create the different proteins our bodies need. Some amino acids can be converted to different amino acids as needed, but some cannot. Those amino acids that the body cannot make are called essential amino acids. These essential amino acids need to be provided in the diet or deficiencies can occur. The human body needs twenty amino acids for protein synthesis. Eleven of them can be synthesized by the body. The remaining nine amino acids must come from daily protein consumption. These essential amino acids are tryptophan, threonine, isoleucine, leucine, lysine, methionine plus cystine, phenylalanine plus tyrosine, valine, and histidine.

Dietary proteins are classified as either complete proteins or incomplete proteins. Complete proteins supply all the essential amino acids to the body. Incomplete proteins only supply some of the essential amino acids. Animal sources of protein such as fish, meat, poultry, eggs, and dairy products contain complete proteins. Plant proteins such as soybeans and quinoa also contain complete proteins. Non-animal foods such as nuts, beans, legumes, and tofu, contain incomplete proteins. With incomplete proteins it is necessary to eat a variety of foods to get all the essential amino acids the body needs. **Chicken is a great source of a complete protein!**

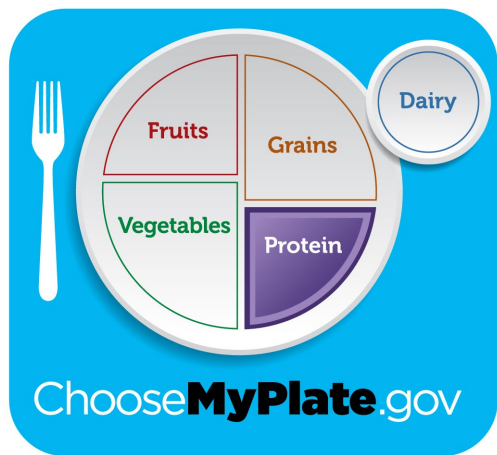
Learn more at www.kentucky4h.org or contact your county extension office.



Protein



The current method for discussing nutrition is the MyPlate.gov with the five food groups of fruits, grains, vegetables, dairy, and protein. There is a lot of information available on the inclusion of fruits and vegetables in a healthy diet, but not much on protein. This series of activities deals with protein as a key food group.



As an introductory discussion, start with the MyPlate.gov and lead the discussion to the role of protein. Explain that protein is made up of building blocks referred to as amino acids. There are many different types of amino acids, and the combination of these amino acids determines the function of the protein.

Possible sources of dietary protein:

- Animal proteins: Beef, Lamb, Chicken, Turkey, Fish, Pork, Eggs, Liver, etc.
- Plant proteins: Lentils, Chickpeas, Black beans, Brussel sprouts, Quinoa, Green peas, Black-eyed peas, Oats, Almonds, Green beans, Almonds, Asparagus, Spinach, Broccoli, etc.

ACTIVITY 1 – Discussion (5-10 Minutes)

Activity:

1. Have the youth discuss what types of protein they each like to eat.
2. Ask them which of these protein sources is their favorite.
3. Ask them which they do NOT like to eat.

Chicken

ACTIVITY 2 - Discussion (10-15 minutes)

Materials Needed

Activity Items:

Handout: 'Why have chicken on your plate?'

Instructions for Activity

In this activity, youth will delve deeper into how chicken makes a great menu item.

Prior to the activity:

1. Make copies of the handout on 'Why have chicken on your plate.'

Activity:

1. Questions for discussion:
 - a. How many in the group eat chicken? If they do, how do they like it cooked? (Fried, Baked, Grilled, Boiled, Broiled, Sauteed, etc.)
 - b. Are there cultural differences in cooking method preferences?
 - c. What is their favorite part of the chicken?
2. Go over the handout



COOKED CHICKEN HEARTS



GRILLED CHICKEN FEET

Dark meat versus white meat

Different muscles of the chicken are used to do different things. The drumsticks and thighs are considered DARK meat. The muscles in these two parts are used for holding the chicken up and walking around. So, the leg muscles are required to work for long periods of time. Breast and wing meat are considered WHITE meat. They are only required to work for short periods of time, like flapping their wings. For poultry species that fly, like duck, the breast and wing meat are dark meat.

Dark chicken meat comes from muscles that use more oxygen than the muscles that are considered white meat. Myoglobin is important for carrying oxygen in chickens. Since the muscles of the legs work more, they need more oxygen, so they have more myoglobin giving them a darker appearance. White chicken meat comes from muscles that do not require as much oxygen, so they have less myoglobin making them lighter in color.

ALL CHICKEN is a good source of protein. All chicken is also a good source of niacin, vitamin B6, biotin, and vitamin B12. There are only slight differences in the vitamin content of white and dark meat. Dark meat does have a slightly higher content of iron which is a major component of myoglobin.

Chicken



**FAJITA WITH GRILLED
CHICKEN BREAST**

The biggest difference between dark and white chicken meat is in the number of calories and fat. Typically, a boneless, skinless breast and breast tenders have the lowest fat and calories levels than dark meat.

Fat in chicken is most often found in the skin. So boneless, skinless breast and skinless thighs are both relatively lean cuts of meat. Drumsticks and wings typically have the skin on, so have a higher fat content.

ACTIVITY 3 – Discussion on edible parts of chicken (5-10 Minutes)



**RAW CHICKEN THIGHS
AT THE STORE**

Materials Needed

Activity Items:

Handout: 'Edible parts of the chicken'

Instructions for the activity

In this activity, youth will delve deeper into the parts of a chicken that can be eaten. Discussions can include cultural diversity in eating habits as well.

Materials:

1. Handout: 'Edible parts of the chicken.'
2. Optional - activity sheet: 'Edible parts of a chicken' word search with a message
3. Optional – activity sheet: 'Edible chicken parts cryptogram'

Activity:

1. Questions for discussion:
 - a. Which of the different edible chicken parts have they tried? This could include gizzards, livers, hearts, feet, heads, and gonads. These parts are typically culture-related and can lead into a discussion of cultural diversity.
2. The youth can complete the optional word search and/or cryptogram puzzles.

Chicken

ACTIVITY 4

Materials:

1. Activity worksheet: Choice of three possible worksheets for developing a story
 - a. My favorite chicken recipe is
 - b. The edible piece of chicken I would NEVER try is
 - c. I do NOT eat chicken because

Activity:

1. Have the youth complete one of the three story outline worksheets and then discuss what everyone wrote with the rest of the class.

Reflection (5-10 minutes)

Debriefing the experience is what moves an experience from an activity to a learning experience. The primary purpose of processing the experience is to allow participants the opportunity to integrate their learning and provide a sense of closure or completeness to their experience.

Share: Examples of questions that can be asked to lead the discussion:

- What did we do?
- What did we learn about chicken?
- What did we learn about including chicken in the diet?

Process: What was the hardest thing to understand?

Generalize: What surprised you the most about what we learned today?

Apply: How will you include this information in your life?

Chicken



Extended Learning:

- Have the students research online the different labels that can appear on chicken sold in the store. These different labels will be discussed in the next lesson, separating fact from fiction.

Reporting Your Success:

Initial Outcomes: As a result of this lesson, youth were able to:

- Understand how chicken can be a nutritious, economic, and versatile addition to their diet.
- Articulate their preference for a particular chicken recipe, why they don't eat chicken, or what part of the chicken they would not eat.

Credits:

This lesson plan was written by Dr. Jacquie Jacob, Department of Animal and Food Sciences, University of Kentucky. March 2024. Development of this curriculum was funded by the U.S. Poultry and Egg Foundation and the Kentucky Poultry Federation.

