

<b>Course</b>	Agricultural Science I
<b>Unit</b>	Introduction to Animal Products
<b>Lesson</b>	Importance of Animal Products
<b>Estimated Time</b>	50 minutes

#### Student Outcome

Describe the importance of animal products.


#### Learning Objectives

1. Explain how the animal processing industry has evolved.
2. Identify career opportunities related to animal processing.
3. Explain the economic importance of animal processing.
4. Describe how processing affects the value of the product.

#### Grade Level Expectations

#### Resources, Supplies & Equipment, and Supplemental Information

##### Resources

1. Activity Sheets
  -  AS 1 – A Career in the Animal Processing Industry
2. *Introduction to Animal Products (Student Reference)*. University of Missouri-Columbia: Instructional Materials Laboratory, 1998.
3. *Introduction to Animal Products Curriculum Enhancement*. University of Missouri-Columbia: Instructional Materials Laboratory, 2003.

##### Supplies & Equipment

- ☐ A food sample (for interest approach)

##### Supplemental Information


1. Internet Sites
  - ☐ “Food Safety Education.” Food Safety and Inspection Service. United States Department of Agriculture. Accessed on October 9, 2007, from [http://www.fsis.usda.gov/Food\\_Safety\\_Education/index.asp](http://www.fsis.usda.gov/Food_Safety_Education/index.asp).
  - ☐ Ray, Frederick K. “Meat Inspection and Grading.” Oklahoma Cooperative Extension Service. Oklahoma State University. Accessed on October 9, 2007, from <http://pods.dasnr.okstate.edu/docushare/dsweb/Get/Document-1950/ANSI-3972web.pdf>.
2. Print
  - ☐ Gillespie, J.R. *Modern Livestock & Poultry*. 7<sup>th</sup> ed. Clifton Park, NY: Delmar Learning, 2003.
  - ☐ Pond, K. and W. Pond. *Introduction to Animal Science*. New York: John Wiley & Sons, 2000.


### Interest Approach

Show a sample of food, such as an egg, a carton of milk, or a piece of meat. Discuss how the product was made ready for the consumer.

### Communicate the Learning Objectives

1. Explain how the animal processing industry has evolved.
2. Identify career opportunities related to animal processing.
3. Explain the economic importance of animal processing.
4. Describe how processing affects the value of the product.

Instructor Directions	Content Outline
<b>Objective 1</b>  <i>Ask students how the animal processing industry has evolved. Record the responses. Discuss the legislative acts and the current role of the USDA.</i>	<b>Explain how the animal processing industry has evolved.</b>  <ol style="list-style-type: none"><li>1. Evolved into large corporations that utilize the entire animal in some manner.</li><li>2. Animal processing started in small privately-owned facilities.</li><li>3. Legislative acts have helped bring consistency to the animal processing industry.<ol style="list-style-type: none"><li>a. Meat Inspection Act of 1906 – Began federal meat inspection by the USDA</li><li>b. Packers and Stockyards Act of 1921 – Prevents unfair business dealings of packers/stockyards and initiated scale testing in sale barns and packing facilities</li><li>c. Wholesome Meat Act of 1967 – Makes state inspection similar to federal inspection</li><li>d. Today, food inspection is under the USDA's Food Safety and Inspection Service</li></ol></li></ol>
<b>Objective 2</b>  <i>Ask the class to list careers associated with animal processing. Have students complete AS 1. Stress that there are countless opportunities for careers in the animal processing field.</i>   AS 1 – A Career in the Animal Processing Industry	<b>Identify career opportunities related to animal processing.</b>  <ol style="list-style-type: none"><li>1. Livestock buyers – Purchase animals for processing company</li><li>2. Federal inspectors – Insure that food is safe and wholesome</li><li>3. USDA meat graders – Assign quality and yield grades to meat carcasses</li><li>4. Quality control supervisors – Supervise employees and ensure quality finished products</li><li>5. Butcher – Cut carcasses into retail and wholesale cuts; also process animals</li></ol>

Instructor Directions	Content Outline
<b>Objective 3</b>  <i>Have students list the dollar amount associated with animal processing.</i>	<b>Explain the economic importance of animal processing.</b>  1. Over 358 billion dollars worth of meat, dairy, and poultry products sold a year 2. Additional income from animal byproducts
<b>Objective 4</b>  <i>Ask students how food costs are affected by the business structure of the animal processing industry. Discuss convenience food such as microwave-ready products and ready-to-eat products.</i>	<b>Describe how processing affects the value of the product.</b>  The more processing involved, the higher the cost of the end product.
<b>Application</b>   AS 1 – A Career in the Animal Processing Industry	Answers to AS 1 Answers will vary.  Other activities 1. Conduct a more detailed research project on the early history of the animal processing industry. 2. List the major animal processing companies in America. Research their annual sales figures.
<b>Closure/Summary</b>	The animal processing industry is a large, complex multi-billion dollar industry. There are many different careers in the animal processing industry. The more processing the raw product receives, the higher the cost of the end product.
<b>Evaluation: Quiz</b>	Answers: 1. d 2. b 3. c 4. Livestock buyer, federal inspectors, USDA grader, quality control supervisor, food inspector 5. Any microwave-ready product and ready-to-eat product (e.g. chicken nuggets)