

ELEMENTARY  
CURRICULUM

# MEET THE **MEAT**



**BEEF**  
.....  
**FARMING**



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*Note:*

This topical must be accompanied with the Overview for complete understanding.

## I. Enduring Knowledge:

Students will understand the role beef farmers have in the production of beef cattle, a source of nutritious food. They will also know about the wide variety of products that are made from beef by-products.

### Learning Targets:

1. Students will know that in addition to healthful food, beef production also contributes to our lives in many other areas, such as home products, medicine, transportation, and more.
2. Students will understand the importance of the nutrient value of animal protein, such as that found in beef.

### Vocabulary:

1. **anticoagulant:** medicines used to treat blood clots
2. **bovines:** the genus of ruminant animals that includes cattle, oxen, and buffalo
3. **collagen:** naturally occurring protein used in plastic surgery and products such as non-stick bandages
4. **domesticated animal:** an animal that relies on people to provide them with food, water and shelter
5. **hypoglycemia:** a physical condition that indicates low blood sugar
6. **ruminant:** hoofed animal that chews cud and has a stomach with multiple chambers
7. **beef cow:** an animal raised to provide beef and by-products for human consumption; in contrast to a dairy cow, whose primary use is the production of milk
8. **steer:** a male bovine animal that is castrated to promote muscle growth
9. **calf:** a young cow or bull
10. **bull:** a male bovine used to impregnate females
11. **heifer:** a young cow before she has had her first calf

## II. Teacher Background Material:

This video helps to explain the process that takes place in raising beef. It also discusses the many contributions the beef industry makes to the quality of our lives in the form of beef by-products, which can be found in our homes vehicles, and medicines.

### III. Before Viewing the Video:

1. Ask the students if they have ever visited a farm where beef cattle are raised. If they have, ask them to describe what they saw.
2. Ask the students what products come from cows. (They will likely mention dairy products and meat but will be surprised when they watch the video to learn that many everyday products come from cows.)

### IV. Viewing Guide:

This video could be used in a number of ways to promote understanding of how beef cattle are raised and the importance of beef in our lives. Asking some of the following questions before the video can help students focus on the information provided:

1. Most beef farms are a family operation. These farms need everyone in the family to pitch in and help run the farm. What are some specific jobs for the kids on the farm?  
(Help feed the animals, take animals to cattle shows, and take care of young calves.)
2. What are some of the different stages in the life of cattle? (New born calves, 7 to 8 months old they begin to eat on their own, 12 to 16 months they can be sold to feed yards or raised in pastures, at this age some cattle are taken to cattle shows where they are sold for breeding stock, cattle 18 to 22 months old are sold to the meat processors.)
3. What product made from beef surprised you?
4. What would happen if beef cattle were not part of our lives?
5. From the list presented in the video write down answers to the following questions:
  - A. What are some things you have used today made from beef?
  - B. What are some things you can see right now made from beef?
  - C. Choose something in the video that you consider the most important product made. Explain why you chose that item.

### V. Discussion Guide:

Go over the viewing guide with the students and ask them to share their answers with the class.

### VI. Evaluation:

Students can hand in the notes that they wrote for the viewing guide.

If the teacher chooses to use the extended learning activities, a rubric or teacher guide should be used to assess a paper, presentation, or product.

### VII. Suggestions for Extended Learning:

1. **Collage:** Students could construct a collage of words or pictures that would teach “The Importance of Cattle in our Lives.”
2. **Puzzles:** Teachers may wish to have students use the computer in creating “crossword puzzles” or “word find” puzzles. The list of the products made by beef is a natural for this kind of assignment. Work on these different puzzles would also help create vocabulary and practice the use of technology.
3. Students could make a list of careers related to beef production and invite them to come to speak to the class. Possible presenters could be: food scientists, farmers, veterinarians, agricultural agents, leather product makers, etc.
4. Have students conduct an audit identifying items that include beef by-products in the classroom or at home.

**Wisconsin Teacher Standards which can be met with this curriculum, including rationale.**

**Standard 1: Subject matter.**

This curriculum provides information not readily available in other forms. A teacher using this material will be well-informed about the subject matter.

**Standard 2: Broad range of ability.**

This curriculum provides instruction that supports their intellectual, social, and personal development.

**Standard 3: Adapt instruction.**

This curriculum provides suggestions for learners with a variety of intelligences and levels of ability.

**Standard 4: Instructional strategies.**

This curriculum includes the use of technology to gain information and suggestion for using research in extending learning.

**Standard 5: Individual and group motivation.**

Both prior knowledge and group projects promote motivation for students to learn.

**Standard 6: Verbal and nonverbal communications.**

Instruction media and technology that promotes active learning are key parts of this curriculum.

**Standard 7: Organizes and plans systematic instruction.**

This curriculum is organized to support teacher knowledge, to draw on and motivate students to engage in active learning, and promotes active inquiry, collaboration, and supportive interaction in the classroom.

**Standard 8: Formal and informal assessments.**

Suggestions for a variety of assessments, both formal and informal, are offered in the curriculum.

**WISCONSIN STUDENT PROFICIENCY STANDARDS** which can be met teaching  
*Beef Farming – Topic Video, Discover Mediaworks, 2012*

## **A. GLOBAL AGRICULTURAL SYSTEMS**

### **Content Standard**

Students will learn about the role of food, fiber, and natural resource systems in their lives and the lives of others around the world.

### **Rationale**

Knowledge of global agricultural systems and the natural resources required to produce food and fiber used in daily life leads students to understand the relationship between production and sustainability. Understanding food and fiber production, distribution, and consumption at local, national, and international levels allows students to comprehend the complex interdependence that exists within agriculture.

**4th Grade: A.4.1**

## **B. TECHNOLOGY/INFORMATION**

### **Content Standard**

Students will demonstrate the ability to access information from multiple sources, synthesize the information, and use it for the technological improvement and stewardship of food, fiber, and natural resource systems.

### **Rationale**

The use of technology for gathering information and producing products within the food, fiber, and natural resource industries is essential in the global marketplace. Producers, processors, manufacturers, and researchers who utilize technology will be able to compete better in the global marketplace. Students must realize that using technology and understanding its potential are lifelong skills necessary for employment and existence in society.

**4th Grade: B.4.2 (see LA A.4.4, E.4.1; SC A.4.3)**

## D. AGRISCIENCE/PRODUCTION

### Content Standard

Students will demonstrate an understanding of the scientific principles and societal implications involved in the production and processing of food and fiber as well as an understanding of basic animal husbandry and sustainable agricultural practices.

### Rationale

Students need an understanding of the scientific principles underlying the production of food, fiber, and sustainable agriculture, and the relationship that this has to their daily lives. Knowledge of the concepts of agri-science production and processing will assist students in making informed consumer choices. By learning about the production of food, fiber, and animal husbandry, students understand the impact agri-science makes on their communities and communities throughout the world.

**4th Grade: D.4.1, D.4.2, D.4.3, D.4.5**

## E. ECOLOGY/ENVIRONMENT

### Content Standard

Students will understand the relationships between natural resources, ecological processes, and the production and processing of food and fiber.

### Rationale

Land and other natural resources need to be managed in a sustainable manner. Balance and agreement need to occur among producers, processors, manufacturers, scientists and other users of natural resources. Students, as citizens, must learn to make informed choices about their environment based on facts.

**4th Grade: E.4.1, E.4.2, E.4.4, E.4.4.5, E.4.6**



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