

ELEMENTARY
CURRICULUM

MEET THE **MEAT**



BEEF UP
FOOD SAFETY



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Note:

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

I. Enduring Knowledge:

When feeding a large population of people it is important to have food safety guidelines.

Learning Targets:

1. Students will learn government regulations provide people in the beef industry with strict rules on raising and processing beef.
2. Students will understand beef safety starts on the farm and continues until beef gets to our tables.
1. Students will learn getting beef from the farms to the table safely depends on many people, such as farmers, food processors, grocery store owners, and finally, the family who is preparing the food.

Vocabulary:

1. **regulations:** rules, ordinances, or laws that control how a particular process that affects the community at large is required to be done
2. **Beef Food Chain:** the various sectors of the beef industry involved in the production and distribution of beef from the farm to the grocery store and restaurant
3. **humane treatment:** treating agricultural animals in a manner that restricts pain and suffering and is safe for people
4. **growth promotants:** a product used with beef cattle to produce more lean beef while using fewer resources like feed. They can be fed or administered through a small pellet (called an implant) that is placed under the skin on the back of an animal's ear. These items must be approved by a regulatory body (Food and Drug Administration) before they are available for use and strict product use instructions must be followed.
5. **antibiotics:** agents introduced into the body that destroy the bacteria that can cause illness in animals or humans

II. Teacher Background Material:

The beef industry outlines how foods we eat are kept safe. They break down safety changes into four areas:

1. The farmers keep beef safe by using appropriate feed, clean environments, the proper administration of US government-regulated growth promotants, and the careful use of antibiotics.
2. The food processor ensures food safety by following strict government regulations and guidelines for processing of beef.
3. The grocery stores or restaurants make sure that beef products are kept at the correct temperature, that beef is handled and processed in clean environments, and that fresh meat is dated and sold

within a time period that ensures quality.

4. The final area of safety in the chain is the home. The following instructions are provided by the U.S. Department of Agriculture's Food Safety and Inspection Service (FSIS) to help ensure the safe handling of beef:
 - Keep refrigerated or frozen. Thaw in refrigerator or microwave.
 - Keep raw meat separate from other foods. Wash working surfaces (including cutting boards), utensils, and hands after touching raw meat.
 - Cook thoroughly.
 - Keep hot foods hot. Refrigerate leftovers immediately or discard.

III. Before Viewing the Video:

Have students prepare a list of ways in which they think food production is monitored all along the food chain; e.g. how do you know the food you eat in a restaurant is safe to eat?

IV. Viewing Guide:

This video could be used in the health curriculum and social studies. Depending on how the video is to be used, the following suggestions for emphasis are offered:

- **Health curriculum:** *Providing safe food for people in a society should be an important discussion. The beef industry has created this video to promote an understanding of how meat can be provided safely to a large population. Understanding the process of getting food safely from the farm to the table will help build students' awareness of safe food handling, including in their own homes. Have students keep a list of steps that are taken to provide the safe food.*
- **Social Studies:** *One area that is important to all members of society is the area of regulations. Teachers may wish to discuss the affects of government regulations on beef processing and in other areas of our lives. Have students take notes on the various references to regulations that they hear as they watch the DVD.*

V. Evaluation:

1. Informal assessment can be made relative to student participation in class discussion.
2. Evaluation of further projects should be based on a teacher developed rubric or set of requirements.

VI. Suggestions for Extended Learning:

There would be many ways to use this video as a starting point for further study.

1. This video could be a way to introduce a discussion on “Government Regulations: Good or Bad?” The oversight of food production is obviously a good way that government works to protect people’s lives. Challenge students to find other positive ways government helps protect people by regulating the way we do things. (Another example of good regulations is in air travel or in the areas of medicine.) Some teachers may wish to find some areas that students think might not need government regulations.
2. Teachers who have time might ask students to research other products that are regulated by government (dairy, poultry, medicines, canned foods, etc.). What are some of the regulations of these products that are unique to that item?
3. Students could visit a farm and ask the farmer to show areas where technology has come into farming (medicine, food mixtures, etc.).
4. A veterinarian, food inspector, butcher, or chef could be invited to talk to the class about raising animals or safe food handling.

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 Up Food Safety – 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

F. BUSINESS MANAGEMENT AND MARKETING**Content Standard**

Students will learn about the operations and economic impact of agricultural business in a world economy.

Rationale

People make complex economic choices related to the allocation of food, fiber, and natural resources. The collective role of consumers, producers, and workers directs business and markets to process, add value, and distribute agricultural products as demanded. It is essential that students learn to make informed choices through the study of production, processing, distribution, and consumption of food and fiber.

4th Grade: F.4.1, F.4.2, F.4.4