



## Lesson Plan

# Tyson Foods – Antibiotics in Chickens

Created: 11/2016 by the National FFA Organization

### STUDENT LEARNING OBJECTIVES:

After completing these activities, students will...

1. Distinguish between the pros and cons of the use of antibiotics in chickens.
2. Create a debate on the use of antibiotics in chickens.
3. Understand the use of antibiotics in chickens.

**TIME REQUIRED:** 45 minutes

**RESOURCES:** FFA.org

### EQUIPMENT AND SUPPLIES NEEDED:

1. A copy of the "Antibiotics—What's the Story?" worksheet for each student.
2. A copy of the "Pros and Cons" worksheet for each student.
3. Internet access to play the video in real time or embed it in a PowerPoint ahead of time.

### THIS QUICK LESSON PLAN WOULD WORK WELL AS:

1. A portion of an animal science unit.
2. A portion of an agriscience unit.
3. A portion of an agricultural issue unit.

### THESE ACTIVITIES ARE ALIGNED TO THE FOLLOWING STANDARDS:

#### *AFNR Performance Element*

- CS.01. Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster
- CS.02. Evaluate the nature and scope of the Agriculture, Food & Natural Resources Career Cluster and the role of agriculture, food and natural resources (AFNR) in society and the economy.
- CS.06. Analyze the interaction among AFNR systems in the production, processing and management of food, fiber and fuel and the sustainable use of natural resources.

#### *FFA Precept*

- FFA.PL-D.Character: Conduct oneself appropriately in relation to others regardless of the situation.
- FFA.CS-M.Communication: Effectively interact with others in personal and professional settings.
- FFA.CS-N.Decision Making: Analyze a situation and execute an appropriate course of action.

#### *Common Career Technical Core*

- AG1 Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster.
- AG2 Evaluate the nature and scope of the Agriculture, Food & Natural Resources Career Cluster and the role of agriculture, food, and natural resources (AFNR) in society and the economy.

#### *NASDCTEc*

- AGC10.03 Compare and contrast issues affecting the AFNR industry including biotechnology, employment, safety, environmental and animal welfare to demonstrate an understanding of the trends and issues important to careers in this industry.

#### *AFNR Cluster Skills*

- CS.01. Analyze how issues, trends, technologies and public policies impact systems in the Agriculture, Food & Natural Resources Career Cluster.

#### *Common Core - Reading: Informational Text*

- CCSS.ELA-LITERACY.RI.9-10.1 Cite strong and thorough textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.
- CCSS.ELA-LITERACY.RI.9-10.4 Determine the meaning of words and phrases as they are used in a text, including figurative, connotative, and technical meanings; analyze the cumulative impact of specific word choices on meaning and tone (e.g., how the language of a court opinion differs from that of a newspaper).
- CCSS.ELA-LITERACY.RI.9-10.8 Delineate and evaluate the argument and specific claims in a text, assessing whether

NAME: \_\_\_\_\_

the reasoning is valid and the evidence is relevant and sufficient; identify false statements and fallacious reasoning.

#### *Common Core - Writing*

- CCSS.ELA-LITERACY.W.9-10.1 Write arguments to support claims in an analysis of substantive topics or texts, using valid reasoning and relevant and sufficient evidence.
- CCSS.ELA-LITERACY.W.9-10.2 Write informative/explanatory texts to examine and convey complex ideas, concepts, and information clearly and accurately through the effective selection, organization, and analysis of content.
- CCSS.ELA-LITERACY.W.9-10.4 Produce clear and coherent writing the development, organization, and style are appropriate to task, purpose, and audience.
- CCSS.ELA-LITERACY.W.9-10.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibility and dynamically.
- CCSS.ELA-LITERACY.W.9-10.8 Gather relevant information from multiple authoritative print and digital sources, using advanced searches effectively; assess the usefulness of each source in answering the research question; integrate information into the text selectively to maintain the flow of ideas, avoiding plagiarism and following a standard format for citation.

#### *Common Core - Speaking and Listening*

- CCSS.ELA-LITERACY.SL.9-10.1 Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9-10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.
- CCSS.ELA-LITERACY.SL.9-10.2 Integrate multiple sources of information presented in diverse media or formats (e.g., visually, quantitatively, orally) evaluating the credibility and accuracy of each source.
- CCSS.ELA-LITERACY.SL.9-10.4 Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

#### *Common Core - Language*

- CCSS.ELA-LITERACY.L.9-10.6 Acquire and use accurately general academic and domain-specific words and phrases, sufficient for reading, writing, speaking, and listening at the college and career readiness level; demonstrate independence in gathering vocabulary knowledge when considering a word or phrase important to comprehension or expression.

#### *Common Core - Literacy in Science & Technical Subjects: Writing*

- CCSS.ELA-Literacy.WHST.9.10.1 Write arguments focused on discipline-specific content.
- CCSS.ELA-Literacy.WHST.9.10.4 Produce clear and coherent writing in which the development, organization, and style are appropriate to task, purpose, and audience.
- CCSS.ELA-Literacy.WHST.9.10.6 Use technology, including the Internet, to produce, publish, and update individual or shared writing products, taking advantage of technology's capacity to link to other information and to display information flexibly and dynamically.

#### *Common Core - Math Practices*

- CCSS.MP1: Make sense of problems and persevere in solving them.
- CCSS.MP2: Reason abstractly and quantitatively.
- CCSS.MP3: Construct viable arguments and critique the reasoning of others.
- CCSS.MP6: Attend to precision.

#### *Common Core - Math (Specific)*

- MP1 Make sense of problems and persevere in solving them.
- MP2 Reason abstractly and quantitatively.
- MP3 Construct viable arguments and critique the reasoning of others.

#### *Next Generation Science*

- HS-ETS1-3 Evaluate a solution to a complex real-world problem based on prioritized criteria and trade-offs that account for a range of constraints, including cost, safety, reliability, and aesthetics as well as possible social, cultural, and environmental impacts.

#### *AFNR Career Ready Practices*

- CRP.02. Apply appropriate academic and technical skills. Career-ready individuals readily access and use the knowledge and skills acquired through experience and education to be more productive.
- CRP.04. Communicate clearly, effectively, and with reason. Career-ready individuals communicate thoughts, ideas and action plans with clarity, whether using written, verbal and/or visual methods.
- CRP.08. Utilize critical thinking to make sense of problems and persevere in solving them. Career-ready individuals readily recognize problems in the workplace, understand the nature of the problem, and devise effective plans to solve the problem.
- CRP.11. Use technology to enhance productivity. Career-ready individuals find and maximize the productive value of existing and new technology to accomplish workplace tasks and solve workplace problems.

NAME: \_\_\_\_\_

### *Partnership for 21st Century Skills*

- Communication
- Information, Communications, and Technology Literacy
- Initiative and Self-direction
- Leadership and Responsibility
- Think Creatively

### **LESSON PLAN:**

1. *Introduction:* Amongst the many agricultural issues and controversies today is the topic of the use of antibiotics in animals, specifically chickens. In today's lesson, we will explore how one company, Tyson Foods, is taking on this issue.

Bell work/Pre-Lesson Activity:

To introduce the students to the lesson for the day:

1. With a partner, define and explain what antibiotics are.
  2. With a partner, brainstorm two misconceptions or ideas about antibiotic use in animals.
2. *Activity 1:* Each student needs a copy of the handout, "Antibiotics—What's the Story?"
    - a. Show the video, "Tyson Foods Seeks to Eliminate Human Antibiotics from its Chicken." The direct URL is <https://youtu.be/rCt505eCjYs>.
  3. *Activity 2:* Each student needs a copy of the handout, "Pros and Cons."
    - a. Reference the video from the previous activity. Students will also need Internet access to help complete this activity.
  4. *Activity 3:* Each student needs a copy of the handout, "Let's Debate It!"
    - a. Reference the video from the previous activity. Students may need Internet access to help complete this activity.
  5. *Follow Up:* Have students write down three things they learned from the lesson, two things they found interesting, and one thing they are still unsure about or have a question about.
  6. *Leveling Up:* Have students research uses of antibiotics in other animals such as cattle, sheep, etc. Pose the following questions as they are researching that topic to help further deepen their knowledge of this agricultural issue:
    1. What misconceptions of antibiotic use are there in other livestock animals?
    2. How can this topic affect you as a consumer?
    3. Why should you as a consumer be concerned about this topic?

NAME: \_\_\_\_\_

# Antibiotics—What's the Story?

## **DIRECTIONS:**

Watch the video, "Tyson Foods Seeks to Eliminate Human Antibiotics from its Chicken." As you watch the video, complete the questions below.

1. What is Tyson Foods doing as a company to help keep their chickens safe and healthy?

2. Identify the two types of antibiotics:

3. What is one major misconception in regards to antibiotic use in chickens?

4. What is one of the major consumer concerns of antibiotic use in chickens?

Aligned to the following standards:  
CS.06.; FFA.CS-M.; AG2.; CCSS.RI.9-10.1; CCSS.RI.9-10.4; CCSS.W.9-10.2; CCSS.SL.9-10.4; CRP.04.

NAME: \_\_\_\_\_

# Pros and Cons

## DIRECTIONS:

Watch the video, "Tyson Foods Seeks to Eliminate Human Antibiotics from its Chicken." Use your answers from the worksheet, "Antibiotics—What's the Story?" to help complete a portion of this worksheet. Internet research will be required to complete part of this assignment.

In order to make an educated choice, you must have all the facts from both sides of an issue. To learn more about antibiotic use in animals, you must do some research on the Internet. Some suggested websites to use are (but not limited to):

- <http://theplate.nationalgeographic.com/2014/10/24/farm-antibiotic-use-getting-worse-before-it-maybe-gets-better/>
- <http://beefmagazine.com/health/0616-antimicrobials-livestock-debated>
- [http://www.lwvstl.org/files/antibiotic use in agriculture ilr oct 2013.pdf](http://www.lwvstl.org/files/antibiotic%20use%20in%20agriculture%20ilr%20oct%202013.pdf)

These are just some suggested sites to help start your research efforts. Be sure to research both the pros and cons of this issue. As you are researching, use the space below to jot down your notes.

**Pros**

**Cons**

Aligned to the following standards:  
CS.01; CS.02; FFA.CS-M; AG1; AG2; AGC10.03; CCSS.Ri.9-10.1; CCSS.RI.9-10.4;  
CCSS.RI.9-10.8; CCSS.W.9-10.1; CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.W>9-10.6;  
CCSS.W>9-10.8; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.SL.9-10.4; CCSS.WHST.9.10.1;  
CCSS.WHST.9.10.4; CCSS.WHST.9.10.6; CRP.04. CRP.11

NAME: \_\_\_\_\_

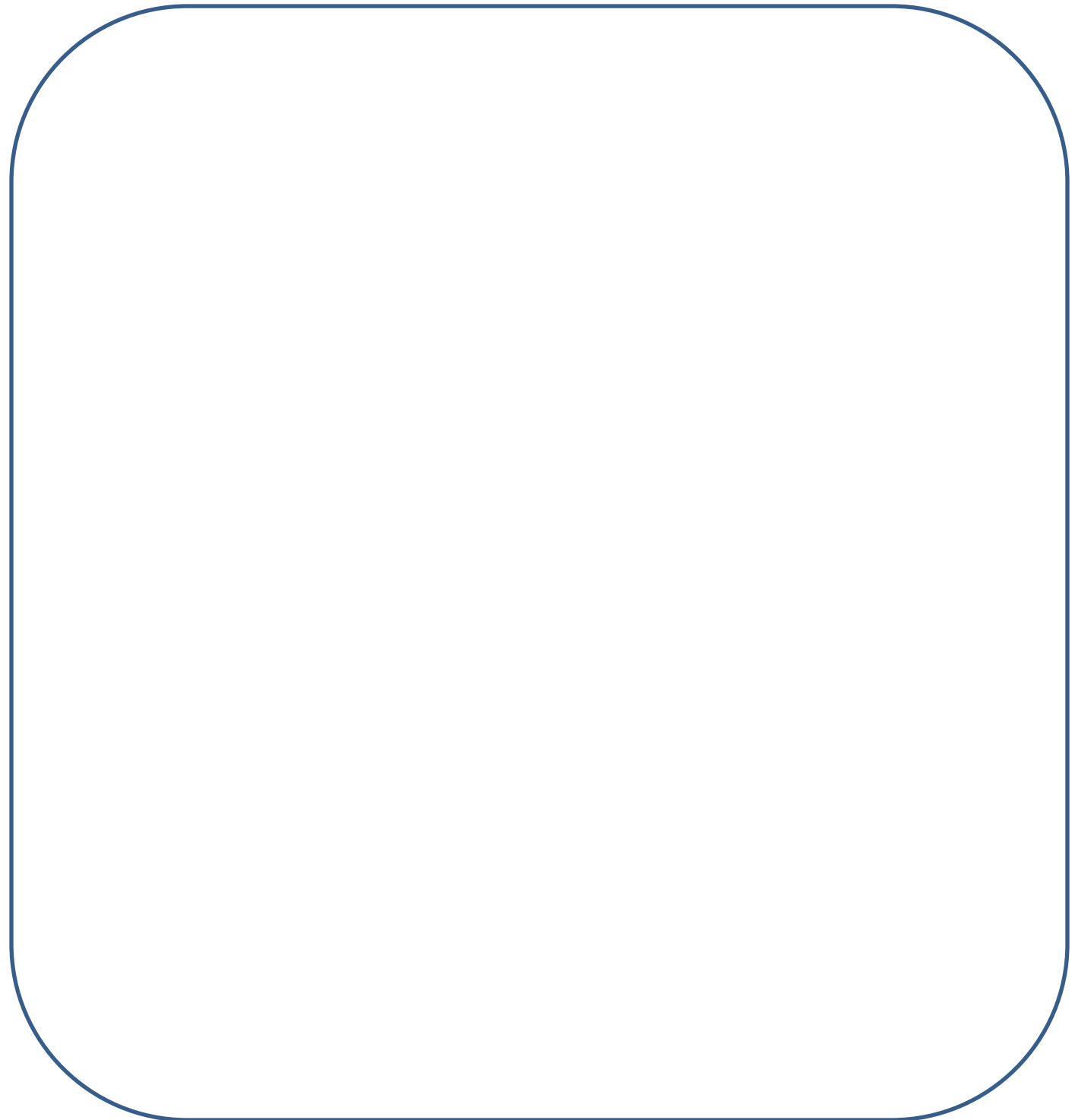
Aligned to the following standards:

CS.01; CS.02; FFA.CS-M; AG1: AG2; AGC10.03; CCSS.Ri.9-10.1; CCSS.RI.9-10.4;  
CCSS.RI.9-10.8; CCSS.W.9-10.1; CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.W>9-10.6;  
CCSS.W>9-10.8; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.SL.9-10.4; CCSS.WHST.9.10.1;  
CCSS.WHST.9.10.4; CCSS.WHST.9.10.6; CRP.04. CRP.11

## Let's Debate It!

### **DIRECTIONS:**

Watch the video, "Tyson Foods Seeks to Eliminate Human Antibiotics from its Chicken." Use your answers from the worksheet, "Pros and Cons" to help create your portion of the debate worksheet. Internet research may be required to complete part of this assignment.



NAME: \_\_\_\_\_

Aligned to the following standards:  
CS.01; CS.02; FFA.CS-M; AG1: AG2; AGC10.03; CCSS.Ri.9-10.1; CCSS.RI.9-10.4;  
CCSS.RI.9-10.8; CCSS.W.9-10.1; CCSS.W.9-10.2; CCSS.W.9-10.4; CCSS.W>9-10.6;  
CCSS.W>9-10.8; CCSS.SL.9-10.1; CCSS.SL.9-10.2; CCSS.SL.9-10.4; CCSS.WHST.9.10.1;  
CCSS.WHST.9.10.4; CCSS.WHST.9.10.6; CRP.04. CRP.11

## Let's Debate It! — RUBRIC

| Component                                                                       | Points Possible | Points Earned | Notes |
|---------------------------------------------------------------------------------|-----------------|---------------|-------|
| Introduction                                                                    | 20              |               |       |
| Identifies and explains three supporting facts for either pro side or con side. | 40              |               |       |
| Conclusion                                                                      | 20              |               |       |
| Debate presentation is between four to five minutes in length.                  | 20              |               |       |
| Total Points Possible                                                           | 100             |               |       |

NAME: \_\_\_\_\_

## KEY: Antibiotics—What's the Story?

### DIRECTIONS:

Watch the video, "Tyson Foods Seeks to Eliminate Human Antibiotics from its Chicken." As you watch the video, complete the questions below.

1. What is Tyson Foods doing as a company to help keep their chickens safe and healthy?

Tyson is doing their part to keep chickens healthy, such as their farmers keeping their houses clean, blending good components in the feed, providing probiotics and herbal alternatives to fight bacteria.

2. Identify the two types of antibiotics:

Animal-only antibiotics and shared class (human and animal antibiotics).

3. What is one major misconception in regards to antibiotic use in chickens?

One major misconception from the public is they just think it is bad in general.

4. What is one of the major consumer concerns of antibiotic use in chickens?

One major misconception is that over time the use of antibiotics in animals will cause bacteria to become resistant to medicine.

Aligned to the following standards:  
CS.06.; FFA.CS-M.; AG2.; CCSS.RI.9-10.1; CCSS.RI.9-10.4; CCSS.W.9-10.2; CCSS.SL.9-10.4; CRP.04.