



Caring for Cows & Nourishing Communities



#UndenablyDairyVFT Virtual Field Trip Companion Activity October 2017

Overview

Dairy foods are recommended as part of healthy eating patterns in part because of the important nutrients they deliver including calcium, phosphorus, and vitamins like A, D and B12 and protein. To help provide this nutrient-rich food to people in a sustainable and responsible way, dairy farmers partner with experts in their community such as veterinarians, nutritionists and technologists.

The Undenably Dairy Virtual Field Trip (VFT) takes students behind-the-scenes to show them key ways farmers and the dairy community bring dairy foods from the dairy farm-to-table, while contributing to sustainable food systems that are good for the land, animals, people and the planet. Join us as we find out about the advances on today's farms.

Grade Level: 5-8 grade

Objectives

Students will:

- Identify sustainable and environmentally-friendly farm practices
- Describe new and innovative approaches to dairy farming
- Explain the positive impacts of farming on society
- Summarize new learning to share information with others on social media

Essential Questions

- How do dairy farms support sustainability?
- How are current dairy farm practices significant to the well-being of communities and society?

Pre-Virtual Field Trip Activity

Dairy foods are an integral part of our diets, but how often do we think about how these foods are produced and where they come from? Before setting off on the Undenably Dairy Virtual Field Trip, engage student interest through a true or false activity about dairy foods and farming.

Materials:

- True or False Statements sheet (1, for the teacher)

Procedure:

Teacher Prep: Prior to the VFT, list on separate sheets of chart paper each of the 5 topics (Care of the animals - health, diet, living conditions; Role of Experts (nutritionist, veterinarian); Use and creation of resources; Technology; Working with local farmers and businesses (farm-to-table); Sustainability - use of



resources). Display the chart papers around the room so all students can read them. Also, write #UndeniablyDairyVFT on the board.

1. Pointing to the phrase #UndeniablyDairyVFT, explain to students that on the **Undeniably Dairy Virtual Field Trip** they will learn about the day to day life on the farm as well as the innovations and technologies farmers use. Note that many of us have ideas about how milk, cheese and yogurt are produced and their connection to farming, but may have little awareness of how dairy farming practices have changed over the years.
2. Say, “Before setting off on our virtual field trip, let’s check to see what we already know about dairy products and farming!” Using the True or False Statements sheet, work together to determine whether a statement is true or false; record the group’s decision for each statement.
3. Have volunteers read the headings on the chart paper aloud. As students watch the VFT, remind them to look out for the key ideas and concepts, which will be needed in the activity that follows the trip.

Post-Virtual Field Trip Activity

As we saw on the “Undeniably Dairy” Virtual Field Trip, dairy farmers are leaders in managing the land and caring for their animals. Selecting crops that grow best in their climate, responsibly using resources and establishing relationships within their community, dairy farmers strive toward continued progress and innovations to contribute to sustainable food systems.

Materials:

- Chart paper (6 pieces)
- Computers, laptops or tablets
- Internet access
- Strips of paper (5 per small group)
- Markers (table group)
- Glue or tape

Vocabulary

- Farm-to-table
- Stewards
- Sustainable

Procedure:

1. Ask students to share information from the VFT they found surprising, interesting or personally relevant. Review the True or False Statement sheet from the pre-VFT activity to determine if any responses need to be changed. Say, “We learned so much about innovative and sustainable practices in dairy farming. I think we should share what we learned with others!”
2. Point out to students that, on the virtual field trip (VFT), many references were made to #UndeniablyDairyVFT. Ask students, “What is the purpose or meaning of this hashtag?” If needed, explain that a hashtag - the symbol # before a group of words or phrase - is commonly used on social media sites to identify or summarize a particular topic. Hashtags can be used to share information, connect people around a topic or movement and quickly bring attention to trending topics.



3. Say, “For example, think of the following hashtag examples: #OceanHero, #HardWork and #BackInMiddleSchool. What do you think is the key idea of each?” Ask students if any of them have used or viewed hash-tagged topics themselves; ask a few students to share those experiences.
4. Explain that #UndeniablyDairyVFT (read as “hashtag undeniably dairy V F T”), gives a clue about the key idea or message of the VFT. Tell students they are going to collaborate to create their own hashtags based on a topic from the VFT and write short, “tweet-like” statements to share key concepts with others.
5. Divide class into five small groups. Referring to the prepared topic chart paper, read each topic aloud and then assign each to a group.
 - Care of the animals - health, diet, living conditions
 - Role of experts; jobs on the farm (nutritionist, veterinarian)
 - Technology
 - Working as a team and with the community
 - Sustainability – responsible use and protection of resources
6. First, have students discuss with their group members what they learned from the VFT (specifically, about their assigned topic). Then, ask them to identify questions they still have about their topic (or additional information they would like to learn). Ask each group to share their questions with the whole group; record students’ ideas on chart paper so everyone can view them.
7. Guide students to work together in their groups to research answers to their questions and/or gather additional information about the assigned topic. Allow about 10-15 minutes of class time for this part of the activity. Circulate among the groups to offer support, as needed. Encourage students to conduct additional research and investigation outside the class period.
8. Say, “Think about what you learned from the VFT and from your research. You’re going to share what you’ve learned with others, but first you’ll work together to come up with a quick way to bring attention to your topic by creating your own hashtag! Your hashtag should help draw attention to and build excitement around your topic. For example – and you can’t use mine! – if I were assigned to the topic “care of the animals,” I might create the hashtag #HappyCows.” Share the following guidelines for constructing hashtags:
 - No more than 5 words
 - Must begin with the # symbol
 - Each word should be capitalized
 - No spaces between words
 - Use appropriate language
9. Provide each group with paper strips (one for each student), glue or tape and markers. Using their paper strips, students write 5 statements that briefly explain or summarize the 5 most important pieces of information related to their assigned topic. Remind students they should follow each statement with their hashtag and #UndeniablyDairyVFT.
10. When finished, have students share their hash-tagged “paper tweets” with each other, then create a display of their #UndeniablyDairyVFT “paper tweet storm” using the sheets of chart paper you prepared. If school and district policy allow, have students post their statements on social media, using the hashtags they created and #UndeniablyDairyVFT.



Additional Resources:

- DairyGood.org: [Dairy a to z](#)
- National Dairy Council: <https://www.nationaldairycouncil.org/>
- Undeniably Dairy: <https://dairygood.org/undeniably-dairy>
- National Dairy Council: Home | National Dairy Council. (n.d.). Retrieved from <https://www.nationaldairycouncil.org/>
- Undeniably Dairy | Dairy Good. (n.d.). Retrieved from <https://dairygood.org/undeniably-dairy>
- Welcome to Western Dairy Association | Western Dairy Association. (n.d.). Retrieved from <https://westerndairyassociation.org/>

National Standards:

[NGSS Science Standards](#)

- MSLS4.D: Biodiversity and Humans. Changes in biodiversity can influence humans' resources, such as food, energy, and medicines, as well as ecosystem services that humans rely on—for example, water purification and recycling. (*secondary to MS-LS2-5*)
- MESS3.C: Human Impacts on Earth Systems Typically as human populations and per-capita consumption of natural resources increase, so do the negative impacts on Earth unless the activities and technologies involved are engineered otherwise.

[CCSS Language Arts](#)

- LITERACY.RST.6-8.2. Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions.



True or False Statements

| Statement | Class Response |
|---|----------------|
| Dairy farmers work with their community to help produce the dairy foods we eat and drink. | |
| A cow's diet consists of grass alone. | |
| Farm to table includes locally grown foods. | |
| Dairy farmers track how many times a day their cows chew. | |
| Part of being a sustainable dairy is recycling water. | |

Answers

1. True. Dairy farmers work closely with a variety of community members to help produce dairy foods, including crop farmers, members of a CO-OP, and even local hardware stores.
2. False. Dairy farmers work with animal nutritionists to ensure that cows have a balanced diet or ration that provides all the nutrients they need to maintain their health and help them produce nutritious milk. In addition to grass, cows also eat alfalfa and food that humans can't digest like cottonseed, almond shells and citrus pulp.
3. True. Farm to table involves all the steps involved to get the food from the farm to the table in a sustainable way. This includes understanding where and how your food is grown and many times those foods are locally grown and delivered. Many dairy farms are less than 100 miles from the lunch or dinner table.
4. True. Farmers use technology to track how much time a cow chews, eats, sleeps and the amount of milk they produce to ensure the cow is healthy.
True. Dairy farmers manage their water use in variety of ways including using technology to monitor how much water their crops need so they're using just the right amount.