



FOOD|FARMS & the FUTURE

Food, Farms and the Future is an educational program that teaches the importance of good nutrition, the science of agriculture and environmental sustainability. The exciting livestream you and your students experienced can be enhanced by using these lesson plans, as well as the other educational materials found on www.foodfarmsfuture.com.

Safeguarding the environment is important to America's pork producers and farmers who work to steward their land for future generations. Protecting resources is a priority because their livelihoods depend on it. That's what sustainable farming is all about.

The first activity in this lesson focuses on sustainability – specifically how pig farmers use technology and other methods to sustainably manage their farms.

The second activity explores nutrition and the benefits of sharing family meals together.

Please share this program with other Family and Consumer Science teachers in your school, as well as your food service director, school nurse, coaches, counselors and science and health teachers. Although the materials are protected by copyright, you may make as many copies as you need for your students.



SUSTAINABLE FARMING NUTRITIOUS MEALS

Target Audience

Students in middle and high school Family and Consumer Science classes

Objective

- Raise awareness of practices pig farmers follow to promote animal welfare
- Foster an appreciation for pig farmers' dedication to environmental sustainability
- Inspire students to create family meal experiences designed to meet MyPlate guidelines

How to Use This Program

Copy the first page of this teacher's guide for your use. Provide students with copies of

the two activity sheets before starting. Students will also need access to the Internet to complete the activities.

Purpose of Activity

Review, Identify Details

21st Century Skills

Critical Thinking

Cognitive Level

Strategic and Extended Thinking

Class Time

45 minutes

Materials

- Internet access
- Pencil or pen

Activity 1 • Farm Science

First, ask students to share ways technology has made their lives safer, better and more efficient. Extend the conversation to discuss how advances in science and technology have benefited other groups, including crop and animal farmers.

For example, pig farmers use technology to implement sustainability practices on their farms, such as equipment that monitors manure output. Manure is an important source of organic fertilizer. Soil sampling and tracking software help farmers match the correct amount of manure with the soil's needs. Good soil health leads to beneficial crop production, which in turn feeds healthy pigs and promotes the production of nutritious pork.

Sustainability in food production helps pig farmers use 75.9% less land, 25.1% less water and 7% less energy in their farming practices.¹

Pass out the activity sheet. **Part 1:** Have students form small groups and visit porkcares.org/americas-pig-farmers/our-farms. Tell them to scroll to the bottom of the

webpage to locate and select farmer profiles to research. Make sure each group has a different farmer. Have students read about their farmer and answer the questions on the sheet.

Part 2: Now, challenge students to invent a tool or method that they think would benefit pig farmers' sustainability efforts. Have them share their tool with the other groups.

Activity 2 • Family Meals

In this activity, students will explore meal choices for their families.

Remind students that having regular family meals is connected to higher grades and self-esteem, as well as positive social behaviors.² Ask students to share some of their favorite family meals and food-related traditions.

Pass out the activity sheet. **Part 1:** Challenge students to create a balanced, nutritional meal plan that will help them enjoy family meals together.

Part 2: Now ask students to plan a meal to enjoy while celebrating a special event. When done, invite them to share their meal plans.



¹ Data Source: A Retrospective Assessment of U.S. Pork Production: 1960 to 2015, Univ. of Arkansas, National Pork Board, 2018.

² fmi.org/family-meals-movement/meals-matter



PART 1: Meet a real pig farmer! With your group, scroll down to the bottom of porkcares.org/americas-pig-farmers/our-farms, and choose a farmer or friend (often a veterinarian) to learn about. Then answer these questions.

Name of the person I chose: _____

Their job or profession: _____

1. How does this person care for the environment, the people around them, and/or their pigs?

2. What are some ways this individual works to meet goals related to animal care, sustainability or other goals?

3. Why do you think this person chose their career?

PART 2: You might not think of IT (information technology) when you think about farming, but technology plays an important role in the success of pig farmers' sustainability practices. For example, GPS systems help farmers regulate the use of manure on their crops. Check out porkcares.org/our-practices/environmental-stewardship to learn more.

Now, imagine that you've been asked to help a pig farmer enhance his or her sustainability efforts. What kind of tool or method do you think might be beneficial? Write and/or draw your idea below, and then share your idea with other groups.

Take a page from a pig farmer's handbook and look for ways you can engage in sustainability practices at your school or home! Share your ideas with classmates.

FAMILY MEALS

ACTIVITY 2 • REPRODUCIBLE MASTER



PART 1: Create a five-day balanced family meal plan. Put together a simple and nutritious meal plan your family can enjoy for the week. Add your choice of protein and finish it off with fruits, vegetables, whole grains and dairy. Use the MyPlate graphic and choosemyplate.gov as a guideline for building a healthy, balanced meal.

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
PROTEIN (ENTRÉE)					
FRUITS					
VEGETABLES					
WHOLE GRAINS					
DAIRY					

PART 2: Now, design a meal for your own family occasion. What will your family celebrate, and what meal will you enjoy?

Occasion: _____ Meal: _____



DID YOU KNOW?*

- Children who eat family meals regularly have higher grades and self-esteem.
- Children who enjoy more family meals tend to eat more fruits and vegetables.