LEARNING ACTIVITIES 2014
Food, Nutrition & Wellness
090107 & 090108

The Nebraska Food Project
Learning Activities 2014

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Nebraska Food Project - 2014
Learning Activity

Author: Lisa Groth

Course Title/Number:
090107 Food, Nutrition & Wellness

Standard Statement/Number:
Standard 1
- Students will understand the basics of the six essential components in food.

Benchmark 1.1
- Identify the six essential nutrients.

Indicator 1.1.1
- Explain protein, carbohydrates, and fats as energy sources for a healthy body function.

Indicator 1.1.2
- Explore how minerals and vitamins affect metabolism in the human body.

Area Addressed:
☐ Career Opportunity
☐ Corn
☑ Dairy
☐ Beef
☐ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
www.midwestdairy.com/0t326p379/the-science-of-milk/

Resources *(Other suggested resources):*

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Research minerals, vitamins, and proteins in milk.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*
Student created booklet (example: milk).
- Sections to include: minerals, vitamins, carbohydrates, water, proteins, fat.
- Nutrients in each section.
- How it effects the human body.

Nebraska Food Project - 2014
Learning Activity

Author: Kelsey Kummer

Course Title/Number:
090107 Food, Nutrition & Wellness

Standard Statement/Number:
Standard 1

- Students will understand the basics of the six essential components in food.

Area Addressed:
☐ Career Opportunity
☐ Corn
☑Dairy
☐ Beef
☐ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
http://www.midwestdairy.com/0t298p335/dairy-imitators/
http://www.midwestdairy.com/download_file.cfm?FILE_ID=2583

Resources *(Other suggested resources):*

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Case Study Simulation.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

- Bring a few "milk" replacement drinks & prepare samples of the beverages for your students.
- As they taste, the students will describe the taste of each beverage as they drink & try to guess what it is.
- Reveal the dairy imitators to your students and provide a hand-out or video source with the 9 essential nutrients of milk. Explain the webpage about how milk replacers don't necessarily replace all of the cow's milk nutrition.

Nebraska Food Project - 2014
Learning Activity

Author: Kelsey Kummer

Course Title/Number:
090107 Food, Nutrition & Wellness

Standard Statement/Number:
Standard 1
- Students will understand the basics of the six essential components in food.

Area Addressed:
☐ Career Opportunity
☐ Corn
☐Dairy
☐ Beef
☐ Soybean
☑ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
www.porkbeinspired.com
Pork check-off materials from Kyla Habrock.

Resources *(Other suggested resources):*
Activity- Experiential Learning.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*
Fly Swatter Activity: Students will learn facts and numbers related to pork production & nutrition
- Put various numbers on the white board and give students fly swatters. They will compete to guess the correct number for the fact-read. Example facts:
    - A 3-oz serving of lean pork offers 8% of the daily value of vitamin B12. (Insert overview of functions of this vitamin).
    - Today's most popular cuts of pork have 16% less total fat than they did 20 years ago.

Nebraska Food Project - 2014
Learning Activity

Author: Tamara Nelson

Course Title/Number: 090107 Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will understand the basics of the six essential components in food.
Area Addressed: ☐ Career Opportunity ☑ Corn ☐ Dairy ☐ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* Corn A to Z poster and products.
Resources *(Other suggested resources):*
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Interactive Instruction.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Show corn A to Z poster and products along with discussion. • Have students pick a product and research how the process is made from corn and share with the rest of the group.

Nebraska Food Project - 2014
Learning Activity

Author: Tamara Nelson

Course Title/Number:

090107 Food, Nutrition & Wellness

Standard Statement/Number:
Standard 1

- Students will understand the basics of the six essential components in food.

Area Addressed:
☐ Career Opportunity
☐ Corn
☐ Dairy
☐ Beef
☑ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
Soybean samples.
Soybean A to Z poster.

Resources *(Other suggested resources):*

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*

Direct Instruction.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

- Show samples of how the soybean is processed into renewable fuels and master fuels.
- Show soybean A to Z poster and discuss.
- Have students research product that's made from soy and put into PowerPoint presentation.

Nebraska Food Project - 2014
Learning Activity

Author: Lisa Groth

Course Title/Number:
090107 Food, Nutrition & Wellness

Standard Statement/Number:
Standard 2
- Student will plan, manage, and evaluate a diet using the USDA Guidelines.

Benchmark 2.1
- Interpret food labels, USDA guidelines, and MyPlate resources to manage a healthy weight for a healthy lifestyle.

Indicator 2.1.1
- Interpret and apply nutrient information to food labels.

Area Addressed:
☐ Career Opportunity
☑ Corn
☑Dairy
☑ Beef
☑ Soybean
☑Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*

Resources *(Other suggested resources):*
Use NuVal resources and other printed nutritional value resources.
www.nuval.com

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Selecting the best nutritional value for individuals by comparing nutritional food labels.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*
"What's the best value?" game.
- Compare nutritional labels of 5 grain products, 5 canned & frozen vegetables, 5 canned & frozen fruits, and 5 dairy products.

Nebraska Food Project - 2014
Learning Activity

Author: Samantha Koehler Overton

Course Title/Number: 090107 Food, Nutrition & Wellness
Standard Statement/Number: Standard 2 • Student will plan, manage, and evaluate a diet using the USDA Guidelines.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☐ Beef ☐ Soybean ☐ Pork ☑ Nutrients
Resources *(Print, video, online resources, etc. available from commodity groups)*
Resources *(Other suggested resources):* http://www.hy-vee.com/health/default.aspx Dietitian blogs.
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Research Project.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* You are headed out for a hike! Create a one day meal for the day before the hike to ensure you have the sustainable nutrients to complete the hike.

Nebraska Food Project - 2014
Learning Activity

Author: Mallory Mohr

Course Title/Number: 090107 Food, Nutrition & Wellness

Standard Statement/Number:
Standard 2
- Student will plan, manage, and evaluate a diet using the USDA Guidelines.

Area Addressed:
☐ Career Opportunity
☐ Corn
☐ Dairy
☐ Beef
☐ Soybean
☐ Pork
☑ Nutrition of the Food Groups

Resources *(Print, video, online resources, etc. available from commodity groups)*
www.choosemyplate.gov/
MyPlate requirement handouts.
www.usda.gov

Resources *(Other suggested resources):*
Scanned copies of food labels of each item.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Interactive, Indirect Instruction, Problem Solving, Case Study, Inquiry.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*
You have options for dinner tonight! Using the provided food labels, decide the best alternative for each of the 5 options. Explain your reasoning for your choice using what you know/have learned about nutrients and MyPlate/USDA daily requirements.

1. Yogurt or applesauce.
2. Pork chop or sirloin steak.
3. Tater tots or steamed broccoli.
4. Cinnamon applesauce or canned peaches.
5. Whole wheat roll or 7 grain roll.

Nebraska Food Project - 2014
Learning Activity

Author: Judeen Price & Jan Smaus

Course Title/Number:

090107 Food Nutrition & Wellness
320100 Middle School Career Development

Standard Statement/Number:

090107 Standard 2

- Student will plan, manage, and evaluate a diet using the USDA Guidelines.

Benchmark 2.1

- Interpret food labels, USDA guidelines, and MyPlate resources to manage a healthy weight for a healthy lifestyle.

Indicator 2.1.6

- Apply the MyPlate recommendations to meet personal nutrition and fitness benefits.

320100 Standard 1

- Students will acquire the skills to investigate the world of work in relation to knowledge of self and to make informed career decisions.

Benchmark 1.2

- Explore careers in the home, community, state, and nation.

Area Addressed:

☑Career Opportunity
☑ Corn
☑ Dairy
☑ Beef
☑ Soybean
☑Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*

Resources *(Other suggested resources):*

www.youtube.com/watch?v=JPugW0JIBnA

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*

Interactive Instruction and Direct Instruction.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

Set: Gather students in small groups of 4-5 to discuss the following questions:

- Do you or someone in your family have a pet?
- What is it and how old/big is it?
- How often is the pet fed and what kind of food?
- Are there any foods that the pet should not eat? Why?

Cue: Briefly in a large classroom setting orally go over the previously assigned questions as a summary. (Focus on the foods that animals are not to eat as a transition to MyPlate).

Lesson: Farmers and ranchers carefully feed their animals a specific amount of food as they grow. In fact, they use technology to regulate how much the animal has of various foods.

- Computer chips are in the animal ear that triggers a specific amount and type of food per animal to descend into the individual food eating areas.
- Large farm and ranch operations hire specific occupations to help with feed rations and health care of animals. Does anyone know what the two animal careers are? (Animal nutritionist and veterinarian).
    - Employing an animal nutritionist and a veterinarian is expensive.
    - Why is it so important to spend money on a nutritionist? Veterinarian? (Allows the animal to grow correctly which results in quality flavorful meat).

Hoes does this information about animal food rations and care relate to humans?

- Do humans have rations of food?
- Is human food intake controlled by technology?
- Do they have occupations that specialize in human food consumption and health care? (Dieticians and physicians).

What guide source for humans was formulated by dieticians? (MyPlate).

- View short video about MyPlate from the University of Nebraska.
- www.youtube.com/watch?v=JPugW0JIBnA

Nebraska Food Project - 2014
Learning Activity

Author: Judeen Price & Jan Smaus

Course Title/Number:
090107 Food Nutrition & Wellness

Standard Statement/Number:

Standard 2
- Student will plan, manage, and evaluate a diet using the USDA Guidelines.

Benchmark 2.1
- Interpret food labels, USDA guidelines, and MyPlate resources to manage a healthy weight for a healthy lifestyle.

Indicator 2.1.6
- Apply the MyPlate recommendations to meet personal nutrition and fitness benefits.

Area Addressed:
☐Career Opportunity
☑Corn
☐ Dairy
☑Beef
☑ Soybean
☑Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
- Soybeans A to Z poster.
- Corn A to Z poster.
- www.nebraskasoybeans.org
- www.nebraskacorn.org

Resources *(Other suggested resources):*
Video: beef.unl.edu (cropwatch.unl.edu/bioenergy/ethanol-by-product-feeds)
www.youtube.com/watch?v=9vVGHrPluPo

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Interactive Instruction, Indirect Instruction.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

Topic: MyPlate: Vegetables (corn is a vegetable until it is popped. Popped corn is considered a grain product).

Set: 3 corn ears or small bowls of corn kernels representing (a) popcorn, (b) sweet corn and (c) field corn.

- Instruct students to write on plain paper the type of corn that "a, b, and c," represent. Allow space to write addition information beneath each one.
- Instruct students to write beneath each type of corn three ways to utilize the food. Example:

a. Popcorn	b. Sweet Corn	c. Field Corn
Popcorn with salt	Corn with butter	Whole corn feed
Popcorn balls	Scalloped corn	Distilled corn feed
Caramel popcorn	Vegetable soup	Ethanol fuel

- Discuss the nutrients in corn (carbohydrate, fiber, vitamin A, and vitamin C).
  - What are the nutrients in corn?
  - What function do they provide?
- What method of preparation is most nutritious? (Avoid added sugar, salt, and fat).
- How does the nutrient level of distilled corn products fed to animals compare to the whole corn? (More concentrated nutrient per portion due to the extraction of moisture as ethanol is produced).
- Teacher's note: Show the following video to show how the distilled corn looks in liquid to pellet form. Video sections of "Storage Methods for Ethanol Co-Products - Nutrient Composition" (beef.unl.edu) Show 01:00 stop and skip to 2:11 show through 3:17. www.youtube.com/watch?v=9vVGHrPluPo
- Discuss: How does ethanol production help humans? (Car/truck fuel, concentrated animal food: humans consume quality pork, beef, etc. as a result).
- What other vegetable both human and animals eat produces a form of energy? (Soybeans).
- What is soy energy called? (Soy diesel or biodiesel).
- Additional items are a result of ethanol and biodiesel production. What might they be? We use them often. (The answer is on two posters titled "Corn A to Z" and "Soy A to Z").

Nebraska Food Project - 2014
Learning Activity

Author: Jan Smaus

Course Title/Number:
090107 Food, Nutrition & Wellness

Standard Statement/Number:
Standard 2
- Student will plan, manage, and evaluate a diet using the USDA Guidelines.

Benchmark 2.1
- Interpret food labels, USDA guidelines, and MyPlate resources to manage a healthy weight for a healthy lifestyle.

Area Addressed:
☑ Career Opportunity / Critical Thinking 1.3.5 / Creativity 1.3.6
☐ Corn
☐ Dairy
☐ Beef
☐ Soybean
☐ Pork
☑ Consumerism & Food Choices

Resources *(Print, video, online resources, etc. available from commodity groups)*

Resources *(Other suggested resources):*

www.hy-vee.com
Store representative.
You Tube videos- type name of food/prep.
www.fruitsandveggiesmorematters.org/

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*

Interactive, Experiential, Independent.
Technology – create grocery advertisement using computer, field trip, taste test, speaker.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

Produce on "MyPlate" (Middle School)

- Visit grocery store/ farmer's market/garden.
- Select new produce for family trial.
- Technology- research facts.
    - County/origin or historical facts.
    - How to prepare/serve.
    - Nutritional value.
    - Search for video steps – how to safely slice and prepare to serve. Select presentation.
- Family taste and rate.
    - Picture it – before/during/after.
    - All family members rate: thumbs up, thumbs down, or thumbs sideways.
        - Flavor, appearance, smell, texture.
- Create grocery advertisement.
    - Produce on "MyPlate".
    - Include:
        - Name.
        - Pictures- before/during/after.
        - Facts (3-5).
        - Nutritional value.
        - Family ratings.
- Extended learning.
    - Share ads with store (Hy-Vee) representative.
    - Field trip or speaker – share more produce choices.
- Share / evaluate.

Nebraska Food Project - 2014
Learning Activity

Author: Jan Smaus

Course Title/Number: 090107 Food, Nutrition & Wellness
Standard Statement/Number: Standard 2 • Student will plan, manage, and evaluate a diet using the USDA Guidelines. Benchmark 2.1 • Interpret food labels, USDA guidelines, and MyPlate resources to manage a healthy weight for a healthy lifestyle.
Area Addressed: ☑ Career Opportunity/ Critical Thinking 1.3.5 ☐ Corn ☐ Dairy ☐ Beef ☐ Soybean ☐ Pork ☑ Consumer Information
Resources *(Print, video, online resources, etc. available from commodity groups)*
Resources *(Other suggested resources):* U.S. Food and Drug Administration: www.fda.gov www.hy-vee.com YouTube video – Reading Labels.
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Direct- Teacher directed – food choices given. Interactive- As a group, check food labels.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

Does the label tell all?

- Select 2 similar foods.
    - Teacher directed teams.
    - Example: Ocean Spray (Cranberry) vs V-8 Fusion (Strawberry Banana).
- Check nutrition labels and discuss with partner which food has "best nutritional value".
    - Give 2-3 reasons for you choice.
- Compare your choice to Hy-Vee ratings.
- Outcomes- verbalize findings.
- Extended Learning.
    - More detailed information of labels and nutritional value.

Nebraska Food Project - 2014
Learning Activity

Author: Jan Smaus & Judeen Price

Course Title/Number:
090107 Food Nutrition & Wellness

Standard Statement/Number:
Standard 2
- Student will plan, manage, and evaluate a diet using the USDA Guidelines.

Benchmark 2.1
- Interpret food labels, USDA guidelines, and MyPlate resources to manage a healthy weight for a healthy lifestyle.

Indicator 2.1.6
- Apply the MyPlate recommendations to meet personal nutrition and fitness benefits.

Area Addressed:
☐Career Opportunity
☐ Corn
☐ Dairy
☐Beef
☑ Soybean
☐Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
- Soybeans A to Z poster.
- www.nebraskasoybeans.org
- I Wish Today's Farmers Would: Avoid GMOS: www.youtube.com/watch?v=IyuX4tRKvGs
- Benefits of Choosing Soy: www.nebraskasoybeans.org/images/uploads/Benefits%20of%20Choosing%20Soy.pdf
- Soy on the MyPlate: www.nebraskasoybeans.org/images/uploads/USDA_MyPlate.pdf
- Soy Pamphlet: www.nebraskasoybeans.org/images/uploads/Soyfood_Brochure_Rev_Final.pdf

Resources *(Other suggested resources):*

- Fields of Energy – Super Soybeans: www.youtube.com/watch?v=347XF1miU0Q
- www.choosemyplate.gov

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*

- Direct Instruction: Structured overview, compare and contrast.
- Experiential Learning: Taste Test.
- Independent Study: Home lab.
- Interactive Instruction: Discussion and class lab.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

Topic: MyPlate- Protein portion of the plate- foods included, nutrition, recommended servings.

- Select 3 soy foods and complete a taste test for each.
    - Examples might include, but not confined to: soy, milk, yogurt, frozen dessert, tofu, and soy vegetable.
- Taste test and responses.
    - Name.
    - Thumbs up or down – flavor.
- Discussion:
    - How is it used?
    - Where does it fit on the MyPlate? Check label for nutritional value. Health benefits of Soy: www.nebraskasoybeans.org/images/uploads/Soyfood_Brochure_Rev_Final.pdf.
    - *"The USDA includes calcium-fortified soymilk within the "Dairy" group. Specific language separates soymilk from such calcium-fortified plant foods as cereals, orange juice, rice milk and almond milk. Although they provide calcium, they may not provide other nutrients found in dairy products and soymilk."*
    - *"Soyfoods can also be found in the new "Protein" food group, previously labeled the "Meat" group. Here, soyfoods are included in two categories. First, soybeans are placed within the bean and pea group. The second group, processed soy products, includes specific types of soyfoods: tofu, white beans, bean burgers, veggie burgers" etc.*
    - *"Soyfoods are included again in the "Vegetables" food group. Consumers are encouraged to select more often such potassium-rich vegetables as sweet potatoes, white potatoes, tomato products, soybeans, lima beans and spinach."*
- Food Lab – Class or Home lab with tofu.

Nebraska Food Project - 2014
Learning Activity

Author: Michaela Vestecka

Course Title/Number: 090107 Food, Nutrition & Wellness

Standard Statement/Number:
Standard 3
- Student will connect the functions of the gastrointestinal system to the functions of the six essential nutrients.

Area Addressed:
☐ Career Opportunity
☐Corn
☐Dairy
☑ Beef
☐ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
- Visual examples of some ingredients in cattle feed provided by Phelps County Feeders.
- Possible online resources by Nebraska Beef Council www.nebeef.org.

Resources *(Other suggested resources):*
Nutrition book.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Direct Instruction: Compare and Contrast. Interactive Instruction: Discussion. Experiential Learning: Field Observations.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*
- Show students examples of cattle feed and provide list of ingredients in cattle feed.
- Discussion or small group work for the following questions:
  - What ingredients and nutrients are present in cattle feed?
  - How are they different from all the nutrients humans need?
  - Why do cows not need all the same amounts of nutrients as humans?
- Idea is for students to know that animal nutrition is just important as or even more important than human nutrition. Animal nutritionists make extra sure animals have good nutrition so that humans have good nutrition.

Nebraska Food Project - 2014
Learning Activity

Author: Kelsey Kummer

Course Title/Number: 090107 Food, Nutrition & Wellness

Standard Statement/Number:
Standard 4
- Students will connect genetics, obesity, weight control, lifestyle and how they relate.

Area Addressed:
☐ Career Opportunity
☐ Corn
☐ Dairy
☐ Beef
☐ Soybean
☐ Pork
☑ Nutrition

Resources *(Print, video, online resources, etc. available from commodity groups)*

Resources *(Other suggested resources):*
www.hy-vee.com
www.nuval.com
Food Network magazine and local registered dietician.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Experiential Learning - Activity.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*
- Follow model from Food Network magazine healthy food comparison.
- Provide 2 foods and ask students which is healthier. Use in PowerPoint or show magazine pictures.
- Once they answer, present with the NuVal information & look at the scores of each product.
- Decide together if one is healthier than the other or if "it's a draw" using NuVal information and discuss.
    - Examples: nut butter (almond butter) vs peanut butter; white vs wheat bread; butter vs margarine.

Nebraska Food Project - 2014
Learning Activity

Author: Samantha Koehler - Overton

Course Title/Number:
090107 Food Nutrition and Wellness

Standard Statement/Number:
Standard 5

- Students will evaluate nutritional needs throughout the lifespan.

Area Addressed:
☐ Career Opportunity
☐ Corn
☑ Dairy
☐ Beef
☐ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
www.Nationaldairycouncil.org
www.Dairygood.org

Resources *(Other suggested resources):*

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*

Research, compare and contrast.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

- Create a list of 10 different dairy products.
- Once complete, create a 2 day menu plan for a 5 year old and for a 65 year old.
- Explain why there may be differences.

Nebraska Food Project - 2014
Learning Activity

Author: Lisa Groth

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices. Benchmark 1.1 • Analyze the effects of global and local events and conditions on food choices and practices. Indicator 1.1.1 • Track a chosen food from farm to table.
Area Addressed: ☐ Career Opportunity ☑ Corn ☐ Dairy ☐ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* www.nebraskacorn.org
Resources *(Other suggested resources):* Ethanol plant manager.
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Create a story.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* Write a story to explain the process of farm to table (agriculture to food: plant to corn, to production, to store, to table).

Nebraska Food Project - 2014
Learning Activity

Author: Lisa Groth

Course Title/Number:
090108 Advanced Food, Nutrition & Wellness

Standard Statement/Number:
Standard 1
- Students will analyze factors that influence nutrition and wellness practices.

Benchmark 1.1
- Analyze the effects of global and local events and conditions on food choices and practices.

Indicator 1.1.1
- Track a chosen food from farm to table.

Area Addressed:
☐ Career Opportunity
☐ Corn
☐ Dairy
☐ Beef
☑ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
www.nebraskasoybeans.org

Resources *(Other suggested resources):*
Co-op manager.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Create a new product.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*
- Create a new product.
- Create a label.
- Create a transportation plan.
- Create a marketing strategy.
- Locate a population of need/interest.

Nebraska Food Project - 2014
Learning Activity

Author: Lisa Groth

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices. Benchmark 1.1 • Analyze the effects of global and local events and conditions on food choices and practices.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☑ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* www.nebeef.org
Resources *(Other suggested resources):* Photos of cow breeds – where popular in country / world.
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Determine the location of beef in the store – sources of beef today; safety, sanitation, maintenance.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* Student Data Research: Cow Tag 531. • Place of birth/origin. • Type of operation born into. • Feed program. • Grass fed vs corn fed. • Background. • Packing situations. • Transportation needs. How it gets to the store.

Nebraska Food Project - 2014
Learning Activity

Author: Kelsey Kummer

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☐ Beef ☑ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)*
Resources *(Other suggested resources):* Kim Clark, Nebraska Agriculture & You.
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Sampling / Experiential Learning.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Have students describe the experience of eating regular grapes. • Ask if they have ever gotten grapes with seeds in them. • Discuss how all grapes would have seeds without genetic modification. • Provide definition and read article on genetic modification.

Nebraska Food Project - 2014
Learning Activity

Author: Kelsey Kummer

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices.
Area Addressed: ☐ Career Opportunity ☑Corn ☐ Dairy ☐ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)*
Resources *(Other suggested resources):* Information on products made from corn/poster. http://www.nebraskacorn.org/wp-content/uploads/2010/07/unit9.pdf
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Experiential Learning – Direct Instruction.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Provide students with samples of corn-based products and have them guess what all the products have in common. • At the end, reveal that all the products are made from corn. • Start a discussion about the long-lasting effects/ impacts of Nebraska agriculture on consumers and citizens of the state.

Nebraska Food Project - 2014
Learning Activity

Author: Kelsey Kummer

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☑ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)*
Resources *(Other suggested resources):* Sample of feed corn & sweet corn.
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Sampling – Interactive Learning.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Students will sample the sweet corn & feed corn to compare and contrast the taste, texture, and benefits of nutritional information. • Segway into discussion about digesting food & how feed for cattle is processed to be better on digestion.

Nebraska Food Project - 2014
Learning Activity

Author: Julie Lokie

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☐ Beef ☐ Soybean ☑Pork
Resources *(Print, video, online resources, etc. available from commodity groups)*
Resources *(Other suggested resources):* Discussion with Dr. Larry Coleman DVM.
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/ engagement possible; See Instructional Methods handout provided)* Problem Solving.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* Given the following information, how many pigs does it take to feed the 500,000 population of Omaha, NE for one year? • 1 pig has 34 baby pigs per year. • 1 person eats an average of 50 pounds of pork per year. • 1 pig produces 300 pounds of pork.

Nebraska Food Project - 2014
Learning Activity

Author: Julie Lokie

Course Title/Number:
090108 Advanced Food, Nutrition & Wellness

Standard Statement/Number:
Standard 1

- Students will analyze factors that influence nutrition and wellness practices.

Area Addressed:
☐ Career Opportunity
☐ Corn
☐ Dairy
☑ Beef
☐ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
www.nebeef.org

Resources *(Other suggested resources):*
Graphic/ Handout of process from field to table.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Indirect Instruction – Problem Solving.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

Using the given resource, have groups of students work together to understand the process and answer the following questions:

- What might happen to the price of beef in the store if weather effects the grass cattle feed on (such as lack of rain)?
- How does US beef help the rest of the world?
- What would happen to the beef processing industry if they couldn't find good employees?

Nebraska Food Project - 2014
Learning Activity

Author: Julie Lokie

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices.
Area Addressed: ☐ Career Opportunity ☐ Corn ☑ Dairy ☐ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* www.midwestdairy.com
Resources *(Other suggested resources):* Farm to School: Did you Know (PDF).
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Experiential Learning - Game.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Use the statements and change them to true and false statements to be used in a "swat the spot" game for students.

Nebraska Food Project - 2014
Learning Activity

Author: Angie Mann

Course Title/Number:
090108 Advanced Food, Nutrition & Wellness

Standard Statement/Number:
Standard 1
- Students will analyze factors that influence nutrition and wellness projects.

Benchmark 1.1
- Analyze the effects of global and local events and conditions on food choices and practices.

Indicator 1.1.1
- Track a chosen food from farm to table.

Area Addressed:
☐ Career Opportunity
☐ Corn
☑ Dairy
☐ Beef
☐ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
www.midwestdairy.com/0t47p61/videos/

Resources *(Other suggested resources):*

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*

Internet search, focused imaging.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

- Briefly discuss farm to table process – either for one food/industry or have students choose one.
- Research the process using commodity/industry related website.
- Illustrate the process to share with classmates.

Nebraska Food Project - 2014
Learning Activity

Author: Angie Mann

Course Title/Number:
090108 Advanced Food, Nutrition & Wellness

Standard Statement/Number:
Standard 1
- Students will analyze factors that influence nutrition and wellness practices.

Benchmark 1.1
- Analyze the effects of global and local events and conditions on food choices and practices.

Indicator 1.1.2
- Choose a current event and give a report/presentation on how that event affects food choices and practices.

Area Addressed:
☐ Career Opportunity
☐ Corn
☐ Dairy
☑ Beef
☐ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*

Resources *(Other suggested resources):*
Newspaper articles.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Internet search.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*
- Once a week, have students research a current event in a certain area (depending on the area addressed). Prepare a short summary on the information found.
- Could also be a good opportunity to teach about internet searches – reliability/credibility of sources, etc.

Nebraska Food Project - 2014
Learning Activity

Author: Mallory Mohr

Course Title/Number: 090108 Advanced Food, Nutrition and Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☑ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* http://www.fda.gov/cvm/green_book/elecgbook.html Food and Drug Administration Website.
Resources *(Other suggested resources):* Beef Council - www.nebeef.org
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Independent Study – Research Projects.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Choose a growth promotant used in beef production and research its: 1. Effect on the animal. 2. How and why it's used. 3. Effect on human consumption. Be prepared to give a brief presentation to the class. EXAMPLE: Estradial, zeranol, androgens, testosterone, trenbolone acetate (TBA), progestins, progesterone, melengestrol acetate (MGA).

Nebraska Food Project - 2014
Learning Activity

Author: Mallory Mohr

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☐ Beef ☐ Soybean ☑ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* Nebraska Farm Bureau: www.nefb.org
Resources *(Other suggested resources):* www.nebraskalegislature.gov Legislative Bills: http://update.legislature.ne.gov Online Resources / Articles related to.
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Interactive Instruction – Debate / Discussion.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Using the legislative regulations provided, create an argument supporting or against bills (pros or cons) related to the pork industry in relation to how it affects the overall health of consumers.

Nebraska Food Project - 2014
Learning Activity

Author: Shelley Moles

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices.
Area Addressed: ☑Career Opportunity ☐ Corn ☑Dairy ☐ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* www.midwestdairy.com/0t326p379/the-science-of-milk/ 48 hours in 48 seconds.
Resources *(Other suggested resources):*
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Students working in teams to do science experiment with milk.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Work with science teacher- students view video and carry out science experiment. • How would you explain the results of the experiment and learning experience? • What scientific principles were demonstrated? • How will this apply to other/similar proteins/nutritional substances?

Nebraska Food Project - 2014
Learning Activity

Author: Tamara Nelson

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 1 • Students will analyze factors that influence nutrition and wellness practices. Benchmark 1.1 • Analyze the effects of global and local events and conditions on food choices and practices.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☐ Beef ☐ Soybean ☑ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)*
Resources *(Other suggested resources):* Dr. Larry Colman and Tim Friedel.
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Indirect Instruction – Problem Solving.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* Ask the following questions before introducing the pork unit: • How many pigs per sow? • How many pigs for harvest? • How many pigs does a sow have per year? • How many sows are needed to feed the Kearney population of 40,000 if one sow feeds 200 people? • How many to feed the population of Omaha?

Nebraska Food Project - 2014
Learning Activity

Author: Michaela Vestecka

Course Title/Number:
090108 Advanced Food, Nutrition & Wellness

Standard Statement/Number:
Standard 1
- Students will analyze factors that influence nutrition and wellness practices.

Area Addressed:
☐ Career Opportunity
☑Corn
☑Dairy
☑ Beef
☑ Soybean
☑ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
Possibly commodity group sites.

Resources *(Other suggested resources):*
Other agriculture related websites.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Experiential Learning: Field trips, Field Observations.
Interactive Instruction: Discussion.
Independent Study: Mapping Activity.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*
- Brainstorm/Discussion – Where does your food come from?
- Field trip to grocery store with list of items to find
  - Could be by department and/or something from each food group.
- Record food product, brand, and where it was made/where it came from.
- Come back to school and plot everything on a map.
  - Could do together quickly, or make a bulletin board, or separately and make it artsy).
- Discuss student reactions to the activity.

Nebraska Food Project - 2014
Learning Activity

Author: Judeen Price

Course Title/Number:
090108 Advanced Food, Nutrition & Wellness

Standard Statement/Number:
Standard 2
- Students will evaluate the nutritional needs of individuals and families in relation to health and wellness across the lifespan.

Standard 7
- Demonstrate food assessment techniques.

Benchmark 7.1
- Prepare food for presentation and assessment.

Indicator 7.1.1
- Display food appropriately and utilize assessment criteria to evaluate foods.

Area Addressed:
☑Career Opportunity
☑Corn
☐ Dairy
☐ Beef
☑ Soybean
☐ Pork
☑ Consumerism

Resources *(Print, video, online resources, etc. available from commodity groups)*

Resources *(Other suggested resources):*
Labels from granola bars from Hy-Vee.
Dietician from Hy-Vee.
www.hy-vee.com
www.nuval.com

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*

Venn Diagram, Interactive Instruction, Direct Instruction, Independent.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

- Set: Several granola bar packages with various NuVal ratings.
- Recall: NuVal rating system and nutrient formulation.
- Compare as a class group the nutrition label differences between high and low NuVal scores.
- Venn Diagram on the white board as a class.
- At random, distribute or draw from a hat one of the following:
    - Dietician: The company you work for wants to improve the NuVal rating of an item (granola bar package). How might the product be changed to improve nutritional content?
    - Chef: The company you work for wants to improve the flavor of an item (granola bar package). How would you enhance the flavor?
    - Consumer: (granola bar package) You've purchased the granola bars and are not satisfied with the product. Write an e-mail to the manufacturer including the NuVal score.
- After students have their assignment, instruct them to write a response. Prepare to orally convey your response. Discuss briefly as a group.
- Continue by inviting a dietician from Hy-Vee to be a speaker addressing the NuVal system and relate the process companies follow to change and improve products.

Nebraska Food Project - 2014
Learning Activity

Author: Angie Mann

Course Title/Number:
090108 Advanced Food, Nutrition & Wellness

Standard Statement/Number:
Standard 3

- Students will demonstrate ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the life span.

Benchmark 3.2

- Design strategies that meet the health and nutrition requirements of individuals and families with special needs.

Area Addressed:
☐ Career Opportunity
☐ Corn
☐ Dairy
☐ Beef
☑Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*

Recipes from www.nebraskasoybeans.org

Resources *(Other suggested resources):*
Other soy based recipes.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Simulation or case study.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

- Develop a meal or snack for an individual with special dietary needs using soy based diet/foods.
- Explore new recipes, substitute soy product for animal product.
- Analyze nutrition of soy based recipe.

Nebraska Food Project - 2014
Learning Activity

Author: Judeen Price

Course Title/Number:

090108 Advanced Food, Nutrition & Wellness

Standard Statement/Number:

Standard 3

- Students will demonstrate ability to acquire, handle, and use foods to meet nutrition and wellness needs of individuals and families across the life span.

Benchmark 3.3

- Demonstrate ability to select, store, prepare, and serve nutritious foods.

Standard 4

- Apply risk management procedures to food safety, food testing, and sanitation.

Benchmark 4.4

- Demonstrate standard procedures for receiving and storage of raw and prepared foods.

Standard 6

- Demonstrate food preparation methods and techniques for all menu categories to produce a variety of food products that meet customer needs.

Benchmark 6.2

- Demonstrate skills for a variety of cooking methods including roasting, broiling, smoking, grilling, sautéing, pan frying, deep frying, braising, stewing, poaching, steaming, and baking using available equipment and current technologies.

Benchmark 6.6

- Demonstrate plating, garnishing, and food presentation techniques.

Sample Performance Indicator 6.6.1

- Define plating, garnishing, and food presentation procedures.

Standard 7

- Demonstrate food assessment techniques.

Benchmark 7.3

- Conduct sensory evaluations of food products.

Sample Performance Indicator 7.3.1

- Utilize sensory criteria to evaluate food products.

Area Addressed:
☑ Career Opportunity
☐ Corn
☐ Dairy
☐ Beef
☐ Soybean
☐ Pork
☑ Produce

Resources *(Print, video, online resources, etc. available from commodity groups)*

Resources *(Other suggested resources):*
Student smart phone, iPad, etc.
www.hy-vee.com
Grocery store or farmer's market.
Various classroom cookbooks or online recipes.
ProStart textbook.
School FACS kitchen labs.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*

Interactive Instruction, Independent Study, Indirect Instruction.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

Produce on MyPlate - Produce items selected by teacher and students before activity begins.

A. Research electronically sanitation procedures to follow with the particular produce item. Share with class and teacher orally.
B. Gather 3 methods of preparation including recipe ingredients and directions. Review and discuss recipes within class setting.
C. Lab: Prepare the produce item using proper sanitation and one of the above recipes (Step B). Plate the food in 3 different ways on 3 individual white plates. Take a picture of each. Print and display with recipe.
D. Taste sample the produce and determine changes if any to the recipe or ingredients.
E. Calculate the cost of the produce and ingredients. Calculate the one serving menu price as per costing formula (use ProStart textbook).
F. Write a menu description of the produce dish in a menu format with the cost per serving. Print and share with class.

This is one piece of the application of MyPlate to the career field of food.

Nebraska Food Project - 2014
Learning Activity

Author: Samantha Koehler Overton

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 4 • Apply risk management procedures to food testing, and sanitation.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☑ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* www.explorebeef.org www.BQA.org
Resources *(Other suggested resources):*
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Group discussion, panel discussion.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Imagine a young calf and the life it leads before it is purchased in a grocery store in Japan. • What steps and places do you think this calf will travel before it ends up on a grocery store shelf? • After students have created a " life map", discuss the actual steps the calf will go through as it is raised and processed.

Nebraska Food Project - 2014
Learning Activity

Author: Mallory Mohr

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 4 • Apply risk management procedures to food safety, food testing, and sanitation.
Area Addressed: ☐ Career Opportunity ☐ Corn ☑Dairy ☐ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* www.dairymakessense.org - Video.
Resources *(Other suggested resources):* www.midwestdairy.com www.nationaldairycouncil.org www.dairygood.org
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Indirect Instruction – Concept Mapping.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* It takes only 48 hours for milk to get to our tables from the farm. • Create a timeline involving the steps from udder to table. When labeling your timeline, identify and give a brief description of how safety is addressed in each step. Examples: Milking stations, transportation (to and from processing plants), pasteurization, homogenization, processing (packaging), store shelves.

Nebraska Food Project - 2014
Learning Activity

Author: Lisa Groth

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 5 • Analyze career paths within food science, food technology, dietetics, and nutrition industries. Benchmark 5.1 • Analyze opportunities for employment and entrepreneurial endeavors. Sample Performance Indicator 5.1.2 • List skills necessary for careers in food industries.
Area Addressed: ☑ Career Opportunity ☐ Corn ☐ Dairy ☐ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)*
Resources *(Other suggested resources):* Kayla Habrock. People in industry, technology, skype.
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* Every pupil response. • Each student writes responses to questions on notecards. • Share randomly in class as called upon.

Questions:

- Who are leaders you know?
- Where have you seen leadership in action? Examples.
- Define leadership.
- Identify leaders.
- What qualities do they all possess?
- Can they use leadership skills in their home, school, career, and/or community?
- Where does leadership fit into the food industry?
- How can it be best utilized from farm to table?
- Where does leadership stem from in the food industry?

Nebraska Food Project - 2014
Learning Activity

Author: Samantha Koehler Overton

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 5 • Analyze career paths within food science, food technology, dietetics, and nutrition industries.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☐ Beef ☑Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* www.nebraskasoybeans.org/soyfoods www.nebioproducts.org
Resources *(Other suggested resources):*
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Circle of Knowledge, Discussion.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Prep- Go through soybean websites and create a list of products, food not made from soybeans. Also add some random products that do not contain soybeans. • Have students go through the list as a class and write if they believe it contains soybeans or not. • Go back through the list to discuss how accurate they were.

Nebraska Food Project - 2014
Learning Activity

Author: Krystal Kolb

Course Title/Number:

014000 Food Science
090108 Advanced Food, Nutrition & Wellness

Standard Statement/Number:

014000 Standard 2

- Analyze Career Paths within the Food Science Industry.

Benchmark 2.3

- Student will be able to develop career-based skills to make them more employable in the industry.

090108 Standard 5

- Analyze Career Paths within Food Science, Food Technology, Dietetics & Nutrition industries.

Indicator 5.1.2

- List skills necessary for careers in food industries.

Area Addressed:

☑ Career Opportunity
☐ Corn
☐ Dairy
☐ Beef
☐ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*

Resources *(Other suggested resources):*

- Blank or lined notebook paper. HANDOUT: Nebraska Standards for Career Ready Practices. www.education.ne.gov/nce/Standards.html
- COPY: Tuttle, Inc Classified Advertisement (found on next page).
- YouTube video: Duracell (Canada) Moments of Warmth (surprise bus shelter). www.youtube.com/watch?v=-mQZqKLiMIg
- Team-building materials dependent on which are chosen:
  - www.buzzle.com/articles/indoor-games-for-team-building.html#woolly-ends
  - www.officearrow.com/8-fun-activities-to-help-build-your-team.html
  - http://humanresources.about.com/od/icebreakers/a/my-10-best-ice-breakers.htm

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*

Direct Instruction, Indirect Instruction, Experiential Learning.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*

ACTIVITY/SELF-ASSESSMENT: What Job Skills/Traits Do I Have?

- Fold a piece of paper vertically to make 4 equal sized columns.
- In first column, list 5 skills/traits you believe employers want in their employees.
- In the second column, list where employees (you) would learn these skills.
- In third column, checkmark those skills (listed in the first column) you believe you have/exhibit.
- Discuss relationship to careers related to the food industry. Discuss their importance in any career.

Tuttle Inc. in Friend is seeking **1st Shift Fabricators/ Installers** and a **2nd Shift General Laborer**. Fabricator candidate should be experience with stainless steel/TIG welding, have mechanical skills, use hand & power tools, able to lift 75 lbs., must be willing to travel, be highly motivated, punctual, reliable and have a positive attitude.

Please do not apply if this is you: Oversleep, have no alarm clock, have no car, have court often, have no babysitter every day, experience flat tires every week, have to hold on to cell phone all day, or become an expert at your job with no need to learn or take advice after the first day. Must be able to talk and work at the same time. Should not expect to receive Purple Ribbons or Gold Stars for showing up to work on time.

Benefits: Health, Life, 2 weeks PTO in the 1st year, profit sharing, SIMPLE IRA matching program, holiday pay, double time on Sundays, per diem, paid hotel and travel time. **Email resume to Amanda at alott@tuttleinc.com.**

HANDOUT: Nebraska Standards for Career Ready Practices www.education.ne.gov/nce/Standards.html
COPY: Tuttle, Inc Classified Advertisement (found above).

- Teacher note: If you are not familiar with the Nebraska Standards for Career Ready Practices and their history, it is strongly recommended that you read through the career ready practices prior to classroom use. Individual student booklets and/or poster can be obtained from the Nebraska Department of Education—Career Education.
- "All students need to be college and career ready"; discuss how the traits discussed in bell ringer are viewed by employers and education worlds.
    - According to the definition of career readiness adopted by the Nebraska State Board of Education on May 5, 2010, page 2 of booklet, "A career ready person capitalizes on personal strengths, talents, education and experiences to bring value to the workplace and the community through his/her performance, skill, diligence, ethics and responsible behavior."
- Using the POSTER as an anchor chart, discuss the skills shown.

- In the 4th column of their ACTIVITY/SELF-ASSESSMENT: What Job Skills/Traits Do I Have? paper, have the student copy the 11 College- and Career-Readiness skills shown.
    - Have the students circle those skills in the 4th column that they believe they possess.
- Facilitate a class discussion about how this can be accomplished, who are the people they know who possess these skills, give examples, advantages, any disadvantages.
- Show students the Tuttle, Inc. Classified Advertisement.
    - Background information: This is an actual classified ad that Tuttle, Inc placed in their local newspaper. It was brought up by a representative of Southeast Community College at the Statewide Career Academy Meeting held in Grand Island, NE in March, 2014.
- Facilitate class discussion about how important college and career readiness skills are in the workplace, in addition to school.

ACTIVITY: Team-Building….Practice makes Perfect.

- Team building activities help foster communication, cooperation leadership, positivity and so much more.

The following are a variety of team-building websites that can be mined for activities appropriate to your class/classroom size, interest, supplies, time, etc.

- To introduce the concept of teamwork, the following short YouTube video can be shown: www.youtube.com/watch?v=-mQZqKLiMIg
    - Discuss with students what they saw in the video (strangers working together, laughing, etc.).
    - Imagine if in the classroom, the lights or the air conditioning/heating wouldn't work unless the class works together in some fashion.
        - What would happen?
        - What would be your role?
- Team-building sites:
    - www.buzzle.com/articles/indoor-games-for-team-building.html#woolly-ends
    - www.officearrow.com/8-fun-activities-to-help-build-your-team.html
    - http://humanresources.about.com/od/icebreakers/a/my-10-best-ice-breakers.htm

STUDENT SUMMARY: Students are to refer back to their ACTIVITY/SELF-ASSESSMENT: What Job Skills/Traits Do I Have? paper.

- Students are to rank on a scale of 1-5 (1=low, 5=high) their level of proficiency for the college and career readiness skills circled. On the back of the printout, have students explain how the team-building exercises can increase their proficiency. Turn in to teacher at end of class.

Nebraska Food Project - 2014
Learning Activity

Author: Angie Mann

Course Title/Number:
090108 Advanced Food, Nutrition & Wellness

Standard Statement/Number:
Standard 5
- Analyze career paths within food science, food technology, dietetics, and nutrition industries.

Benchmark 5.1
- Analyze opportunities for employment and entrepreneurial endeavors.

Indicator 5.1.2
- List skills necessary for careers in food industries.

Area Addressed:
☑ Career Opportunity
☐ Corn
☐ Dairy
☐ Beef
☐ Soybean
☐ Pork

Resources *(Print, video, online resources, etc. available from commodity groups)*
Kayla Habrock - www.nepork.org

Resources *(Other suggested resources):*
People in industry, technology, local ag/food service industry.

Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)*
Role Play, Simulation, Experiment.

Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)*
Why might leadership skills be necessary in the food industry? Lab team building activity:
- Split class into teams. Present them with a culinary or ag/food related problem & ask them to work through solving the problem.
- After a short period of time, debrief groups on problems, successes, and how to solve them more effectively.

Nebraska Food Project - 2014
Learning Activity

Author: Mallory Mohr

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 5 • Analyze career paths within food science, food technology, dietetics, and nutrition industries.
Area Addressed: ☐ Career Opportunity ☐ Corn ☐ Dairy ☐ Beef ☑Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* Print source: www.ncsoy.org/ABOUT-SOYBEANS/Uses-of-Soybeans.aspx
Resources *(Other suggested resources):* www.agp.com www.nebraskasoybeans.org
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Independent Study / Research Project.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* Soybeans are obviously used for human and animal consumption but it is also turned into biodiesel or energy. • Research the various products and choose one to do further research of how that product is made from soybeans.

Nebraska Food Project - 2014
Learning Activity

Author: Mallory Mohr

Course Title/Number: 090108 Advanced Food, Nutrition & Wellness
Standard Statement/Number: Standard 5 • Analyze career paths within food science, food technology, dietetics, and nutrition industries.
Area Addressed: ☐ Career Opportunity ☑ Corn ☐ Dairy ☐ Beef ☐ Soybean ☐ Pork
Resources *(Print, video, online resources, etc. available from commodity groups)* www.nebraskacorn.org
Resources *(Other suggested resources):*
Instructional Strategy/Method *(Method chosen should be at the highest level of student involvement/engagement possible; See Instructional Methods handout provided)* Indirect Instruction – Concept Mapping.
Activities Overview: *(Designed to provide a structure for learning that actively promotes the comprehension and retention through the use of engaging strategies)* • Pretend you are a mature ear of sweet corn ready to be picked in the field and trying to get to George's family table. • Create a map or diagram that lists the process of how that would happen. The two paths you could map could be through a local farmer or by way of a Green Giant can.