



Reading between the Lines

Middle School Food and Agricultural Literacy Curriculum

Precepts

- D. Character
 - D1. Live with integrity
- N. Decision Making
 - N3. Make ethical decisions

National Standards

- CS.01.04.01.c. Perform tasks with integrity.
- CS.03.02.03.b. Practice ethical behaviors.
- FPP.03.01.06.a. Explain the importance of food labeling to the consumer.
- NL-ENG.K-12.4 – Communication Skills
- NL-ENG.K-12.12 – Applying Language Skills
- NS.5-8.3 – Life Science
- NS.5-8.6 – Science in Personal and Social Perspectives
- NSS-EC.5-8.7 – Markets and Market Prices

Student Learning Objectives

- As a result of this **unit** the student will...
- Create informed, educational and confident consumers of agricultural products.
- As a result of this **lesson** the student will...
- Recognize agricultural product labeling.

Summary of Content and Teaching Strategies

Objective 1. Recognize agricultural product labeling

- I. **Compare food labels of beef, milk, tortilla chips, and vegetables**
 - A. Locate the labels
 - B. Identify differences between labels
 - C. Examine each label and define the special brands

Time

Instruction time for this lesson: 45 minutes.

Resources

AllNaturalFoods.com. (2000). What are all natural foods? Retrieved July 27, 2009, from AllNaturalFoods.com Web site: <http://allnaturalfoods.com/> — Gold, Mary V. (2008). Sustainable Agriculture: Definition and Terms. Retrieved July 27, 2009, from United States Department of Agriculture National Agriculture Library Web site: <http://www.nal.usda.gov/afsic/pubs/terms/srb9902terms.shtml#term23> — Vegan. (n.d.) In Ask.com, www.dictionary.com Retrieved from <http://dictionary.reference.com/browse/vegan> — United States Department of Agriculture. (2005). What are GMO's? Retrieved July 27, 2009, from United States Department of Agriculture: Agriculture Research Service Web site: <http://www.ars.usda.gov/Research/docs.htm?docid=7205> — Certified Angus Beef Brand: About the Brand (2009). Retrieved July 27, 2009, from Certified Angus Beef Brand Web site: <http://www.certifiedangusbeef.com/brand/index.php>

Tools, Equipment, and Supplies

Student journals or notebook paper
MS.IAS.6.1.ASSESS.A – one per student
Food product labels containing phrases "all natural," "organic," "vegan" and "GMO"

Key Terms

The following terms are presented in this lesson and appear in **bold italics**:

All Natural
Organic
Vegan
GMO

1. ***All Natural***
2. ***Organic***
3. ***Vegan***
4. ***GMO***
5. ***Certified Angus Beef***

Interest Approach

Begin class by asking students who they have trusted today. As people/services are being listed, take note of those of the most commonly listed items. Have students follow these items/people back through their process of being manufactured or produced. For example, food products could be traced from a cafeteria worker, to a grocery store, to the trucker, to the grower, etc.



Lesson Number: MS.IAS.6.1

Middle School Food and Agricultural Literacy Curriculum

Reading between the Lines

Upon reaching these conclusions, help students understand the importance of being honest when labeling products or being entrusted with something belonging to other individuals. Build upon the LifeKnowledge concepts of making ethical decisions and living with integrity.

Use the following questions to lead the discussion:

Who or what have we trusted today?

Lists may include bus driver, food service worker, mom, dad, teacher, police officer, etc.

I am sure we have quite a list so far, but let's take this a step further. Choose two of the people/things on the list. Trace these two people back even a step or two further. For example, I trusted the food service worker to properly prepare my food for lunch. Who did she trust when she received this food?

Answers may include the person who delivered the food, the company she received the food from, etc.

Who did the delivery person trust when they received the food?

Continue this process, leading the students to the farmers and/or the people who labeled the food item.

Great point! The people or company in charge of labeling the food trusted that the farmer or producer correctly reported to them how the food was produced, whether production involved use of hormones, chemicals, or fertilizers, and what production system may have been involved, such as free range or grass-fed. Every day we trust numerous individuals with the basic necessities of our lives. What if these individuals were not being honest? How would that affect our daily lives? How would the agriculture industry be affected if producers were dishonest? What would that do to the industry or our desire to buy the food farmers produce?

Allow students 30 seconds to discuss the possible effects of dishonesty with a partner. Solicit responses from groups and share aloud.

Let's hear some of our responses.

After hearing the responses dealing with food items, draw the conclusion that people in the process all have decisions to make, and it is important for them to make ethical decisions. In order to maintain their integrity workers from farmers to producers must give the best product possible to the consumers.

Every day people in food production all the way from the farmer to the food service worker or chef are entrusted with very important decisions. We as consumers entrust them to make ethical decisions in order to ensure a quality product that we take home to eat for supper. Let's imagine how we would feel if one of the people in that process from farmer to plate was unethical and lied about what was in their food product. The effects could be detrimental.

Upon reaching this conclusion, draw students to the understanding of why they should also make ethical decisions and live with integrity.

Even we as students are faced with tough decisions on a daily basis. These decisions we make mold us into the person we are today and into the person we will become in the future. Take a moment to think about the person you hope to become. How do you plan to make ethical decisions and be a person who lives with integrity?

After a moment of thought, have students journal about their ideas and thoughts of making ethical decisions and living with integrity.

Let's take two minutes to journal our thoughts so we can look back on them in times when we are faced with a tough decision.

Thanks for taking the time to think about how we can live with integrity. I strive to live that way and make ethical decisions also, and I hope the people around me choose to do the same. Now let's travel back to the food industry. Why again is it important for farmers and producers to correctly report what is in a food item?

Lead students to the conclusion of product labeling and allowing consumers to know what is in their food.

That's exactly correct! We want to know what is in our food products and how they are grown. We as consumers expect the company that sells these items to label them correctly so that we know what we are consuming.



Reading between the Lines

Summary of Content and Teaching Strategies

Objective 1. Recognize agriculture product labeling.

Who has ever been grocery shopping? Who has ever looked at a can of food? That's what I thought – everyone! We may not have noticed, but if we have been grocery shopping or have ever looked at a food package, we have probably seen a food product label. Our parents probably pay more attention than we do right now, but just wait until we are responsible for buying groceries. Then we will want to know what's on the label!

What are some factors that your parents use to determine the food they buy? Do your parents look at nutritional benefits? Safety? Production practices? Let's quickly share our thoughts on how our parents make their selections.

Great conversation! Now let's take a look at some food labels and see if we can decipher what these products really mean:

Show product label comparisons and have students look at them to decipher the differences in the labels. Magazine ads featuring various food product labels may also be used to represent these comparisons.

Sample products for comparisons may be:

Chips – genetically modified and non-genetically modified

Beef – Certified Angus Beef and regular ground beef or beef product

Dairy or vegetable – Organic and non-organic

All natural products

Farm fresh products

Use the statements to get the students thinking about each of these labels and the differences between them. Show one group of comparisons at a time; compare beef labels and discuss; compare chip labels and discuss.

All Natural – Foods without artificial colors, flavors, or other petro-chemical additives

Organic – Foods that have not experienced the use of synthetic fertilizers, pesticides, growth regulators, feed additives, etc.

Vegan – Food that contains no animal products

GMO – genetically modified organisms – Food products that are derived from plants that have been genetically modified to be insect resistant or herbicide tolerant

Certified Angus Beef – Beef products that have passed ten specific qualities in order to be labeled with the Certified Angus brand

Discussion questions to utilize with the class after reviewing the products.

Why do you think that there are differences in the way that similar products are labeled?

Expect answers such as: items are grown differently; different flavorings; different brands; etc.

How would you compare two similar items based on what's on the label?

Expect answers such as: nutritional information; flavor; etc.

Why is it important to understand the terminology used on food labels?

Expect answers such as: so you know the product that you are buying; you can make an educated decision; etc.

You may also include information on credible sources to find nutrition label terminology, such as the USDA food label terminology site.

How will knowing this information impact our selection of products?

Expect answers such as: being informed and can make an educated decision; etc.

If it is not brought up by a student, incorporate how knowing this information will help us to make decisions based on sound science rather than our emotions.

Review/Summary

Use the *Eye Witness News e-Moment®* to help students review what they have learned today. Give the students a prompt and scenario to begin the interview process. Allow the students three minutes to do their interviews, alternating roles at 90 seconds. At the conclusion of three minutes, randomly select three groups to role play their interviews for the class.



Lesson Number: MS.IAS.6.1

Middle School Food and Agricultural Literacy Curriculum

Reading between the Lines

Today we have discovered that we as consumers find it very important for producers and labelers to be honest when marking their food products. To ensure that we are clear on this topic, let's take a few moments to interview each other about what we have learned today. When I say LABEL, with the person sitting next to you take three minutes to interview each other about food product labels and the importance of being able to trust what those labels say. Each group member will play the interviewer for 90 seconds and then switch roles. At the conclusion of three minutes, everyone will return to the front and three teams will be randomly selected to share their interview with the class. What questions are there?

To begin our interviews use the following prompting question and/or scenario:

Any of the following questions may be used to get the students started. Each team may also start with a different prompt in order to vary the interviews and review.

Possible scenarios:

News reporter interviewing a customer at the local grocery store

Grocery store customer interviewing the produce stock person and/or the store's butcher

Possible leading questions:

What kind of food labels are we looking for today?

What do we see that surprised us about the labels we saw today?

What can we take home to our family after seeing these labels today?

What last questions can I answer? LABEL!

At the conclusion on 90 seconds yell SWITCH for students to change roles. At the conclusion of three minutes, count the students back from five to get them to wrap up their interview.

Wrap up those interviews in 5 – 4 – 3 – 2 – 1. And that's a wrap!

Select three groups to share their interviews.

Great work, students! We have certainly nailed this information on food labeling. I hope the next time we go to the grocery store or even look in the cupboards at home, we can identify those important food labels and know what it is in our food.

Application

Extended classroom activity:

Have students bring five food labels from home that have something labeled on them that would be different from the norm. Share these with the class and hold a class discussion about what these labels mean. Students may also research these new label titles and report back to the class on their findings.

FFA activity:

Collect various food labels. Prepare a collage of these labels, grouping them according to type. Add informative message to the collage that will stand out for passersby to read. Hang these collages or one large collage in the school's cafeteria to educate consumers about the product labeling they may see when they select food to eat.

SAE activity:

Research the positive and negative effects or pros and cons of two comparable items (Certified Angus Beef and regular beef products; genetically modified tortilla chips and non-genetically modified tortilla chips; all-natural products and non all-natural products). Prepare an informational brochure for consumers at their local grocery store.

Evaluation

MS.IAS.6.1.ASSESS.A

Answers to Evaluation

1. D
2. E
3. B
4. A
5. C



Name _____

Directions: Match each term with the correct definition.

1. _____ All Natural

A. Food products that are derived from plants that have been genetically modified to be insect resistant or herbicide tolerant

2. _____ Organic

B. Food that contains no animal products

3. _____ Vegan

C. Beef products that have passed ten specific qualities in order to be labeled with this brand

4. _____ GMO

D. Foods without artificial colors, flavors, or other petro-chemical additives

5. _____ Certified Angus Beef

E. Foods that have not experienced the use of synthetic fertilizers, pesticides, growth regulators, feed additives, etc.