



Marketing, Messaging, and Your Meals Beyond the Label: Critical Consumer

In this lesson, students will investigate how food products are currently marketed to consumers, as well as develop an understanding of the current requirements and industry practices around food labeling in the United States.

Students will analyze sources of information and potential motives around the messaging of food products; the roles and responsibilities of various organizations in the food labeling process; and individual consumers' responsibility in regard to healthy eating and decision-making about food.

After understanding the various ways that food labels currently convey information to consumers, students will examine the relative value of various pieces of information on food labels through different perspectives. As an extension, student groups are asked to redesign a food label and present each of their designs to the class, defending their choices about the essential nutritional and marketing information it contains.

Content Areas: Health, Social Studies, Life Science

Grade Level: Grades 9-12

National Standards:

National Health Standards

- 3. 12. 1 Evaluate the validity of health information, products, and services.
- 7.12.1 Analyze the role of individual responsibility for enhancing health.

Next Generation Science Standards (NGSS)

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

National Standards for the Preparation of Social Studies Teachers

Examine multiple perspectives on public and current issues.

National Health Standards

- 3. 12. 1 Evaluate the validity of health information, products, and services.
- 7.12.1 Analyze the role of individual responsibility for enhancing health.

Materials:

- Computers connected to the Internet
- Chart paper and markers

Various food labels from packaged food items (optional)

Copies of:

- Food Label Comparison student handout
- Roles and Perspectives student handout
- Multiple Perspectives student handout
- Designing a Food Label student handout

Essential Questions:

- How informative are food packaging labels in helping consumers make thoughtful decisions about what they eat?
- What role should the government or non-governmental certification organizations play in deciding what information should or must be included in food packaging labels? How does consumer selection or avoidance drive marketing or influence trends?
- What responsibility should consumers accept for making their own healthy eating decisions?

Engage

Slides 1-4

Slide 1

- Arrange students in small groups, and hang a blank sheet of chart paper for each group in different areas of the room. Ask: “What do you know about food label claims?” and instruct student groups to list everything they know or think they know about the labels they have observed on food packaging, using the chart paper to capture their ideas. At set intervals, ask students to rotate and annotate the other groups’ chart paper to identify which statements they agree or disagree with.

Slide 2

- Introduce the concept of a misconception. A misconception is an idea or opinion that is incorrect because it is based on a mistaken thought or understanding. Invite students to revisit their chart papers and identify what they think the biggest misconceptions are about food labels.

Slide 3

- Combine the small groups to form two large groups of students.
- Explain that there are many misconceptions about food label claims. It is important to be able to separate truth from misconception. Distribute two index cards to each group: one with “Fact” written and one with “Misconception”.
- Display and read aloud the first statement and invite students to discuss their response as a group.
 1. Sugar free has fewer calories than the regular version.
 2. Free range chicken means the chicken has exposure to the outdoors.
 3. Fat free products do not contain any fat.
 4. Organic products typically mean they are healthier for you.
 5. Gluten-free labels help consumers identify healthy, low carb options.
- Invite each group to hold up the card they think is correct.
- Reveal the correct answer and explain using the clarification statements below. Repeat for statements 2-5.
 1. Misconception. According to the FDA, to be labeled sugar-free, the products must have less than 0.5 grams of sugars per serving. The product can still contain calories and carbohydrates from other sources.

2. Fact. According to the USDA, there are no requirements for the amount, duration, and quality of outdoor access.
3. Misconception. According to the FDA, to be labeled fat-free, the products must have less than 0.5 grams of fat per serving. It can still have sugar and just as many calories as the regular version. In some foods, the decrease in fat may mean an increase in sodium.
4. Misconception. According to the USDA, a product with an organic label means that 95% or more of the ingredients must have been grown or processed without synthetic fertilizers or pesticides. This does not mean the product is healthier as it can still be high in calories and sugar.
5. Misconception. According to the FDA, labels with gluten-free mean that a food must limit the unavoidable presence of gluten to less than 20 parts per million (ppm). It does not mean the product is healthier, low carb, or organic. Foods that do not even contain gluten, like vegetables and fruits, can be labeled gluten free.

Slide 4

- After all of the statements have been reviewed, lead a discussion around the following guiding questions:
 - Which fact or misconception statement is most surprising?
 - What misconception do you think is most common and why?
 - Which misconception do you think is most important to understand, and why?

Explore

Slides 5-8

Slide 5

- Explain to students that they may be more familiar with food label claims that refer only to what is inside their food. Certain information is mandatory on all of these labels: name of the food, nutrition fact, net weight of the contents, name and address of the manufacturer, packer, or distributor, and ingredients list. Now, food labels mention how the food was raised, grown or processed, and claims about its nutrient content and health. Front of package information is voluntary but is in different stages of regulation from the FDA and USDA as new terms are constantly emerging. Students will begin to examine the different types of food labels and the information they convey to consumers.

Slide 6

- Assign groups of 3-4 students. Use the slide to display a word splash of different food label claims. Students could also add to this list of claims they have seen on their food.
 - Calcium builds strong bones
 - Now with reduced fat
 - Fiber maintains bowel regularity
 - Natural
 - From grass-fed cows
 - Fat free
 - Locally produced
 - Farm fresh
 - Locally produced
 - Non-Genetically Engineered
 - Certified Organic By . . .
 - Pesticide free
 - Antibiotic free

Hormone free

- Explain to students that the Food and Drug Administration defines three categories of claims that explain **what is in the food**, and one that explains **how it is raised, grown, or processed**. These types of claims can all appear on food labels. Invite students to sort the word splash of claims, on their own, into four categories.

Slide 7

- Ask students to share their categories with a partner group. Display the sentence starters using the slide. Students should use at least 3 sentence frames to respond to the other group's categories. Groups can make changes to their categories based on their discussion and feedback.
 - One point that was not clear to me was . . .
 - I noticed . . .
 - You made a strong argument when you said . . .
 - Your thinking shows . . .
 - One question I have is . . .
 - Help me understand . . .
 - I agree/disagree with _____ because . . .
- Next, provide the **Food Label Claims student handout** revealing the four categories of claims. Invite students to reassess their categories and check their work.

Slide 8

- Clarify with students that food label claims describing how food was raised, grown, or processed, is voluntary. Sometimes manufacturers are very creative in how they phrase these types of claims which can make them very misleading to consumers. This type of food label is in different stages of regulation from the FDA and USDA as new terms are constantly emerging to influence consumers into purchasing products.
- Share with students one way food label claims are written is by using absence labeling. This type of claim tells consumers what **isn't in** a product rather than **what is**. Ask students to look back at their word splash from slide 6 and identify an example of an absence claim.
- Click the slide to reveal a hormone free food label claim. Hormone free is an example from slide 6 that would be an absence claim. Share that absence claims can be very misleading. To a consumer, this might sound like a good thing to not have hormones included. But we know that animals naturally produce hormones, they cannot actually be hormone free. Some claims like "no added hormones" may also be misleading because hormones are not added in the first place. The claim of "no added hormones" is accurate but gives consumers the impression that the other product does have added hormones. This implies that the "no added hormones" product is better, when in reality, they are the same.
- Ask students to rank the four categories as most helpful information when reading a food label to least helpful. This is a subjective ranking and is meant to foster conversations, dialogue, and creative thinking among students as they begin to examine different types of food labeling claims.

Explain

Slides 9-13

Slide 9

- Display an example of a front of label claim. Ask students to identify the claims presented on the packaging. Students should identify claims such as: Premium Fresh Young Chicken, All Natural,

Fed a Vegetarian Diet with No GMO feed ingredients, All Natural, Raised without Added Antibiotics, and No Added Hormones.

- Suggested label claim images:
 - <https://www.fsis.usda.gov/wps/portal/fsis/topics/regulatory-compliance/labeling/claims-guidance/procedures-nongenetically-engineered-statement>

Slide 10

- Divide students into teams of 3-4. Each team will investigate the food label claims through a different perspective.
 - Farmer/Rancher:** Describes how the food was raised, grown, or processed.
 - Consumer:** Read the label claims and use the information when selecting products.
 - USDA/FDA governing agencies:** Identify what is in the food and regulate wording of claims on labels.
 - Marketing:** Use trendy terms to influence consumers to purchase a product. Assign a role to each group.

Slide 11

- Guide students to examine food label claims from the perspective of the person represented by reviewing current policies and regulations, infographics, and interviews through the lens of their assigned perspective. Provide time for students to conduct their research and record their findings using the **Roles and Perspectives student handout**. Students can conduct research using the following online resources:
 - FDA - Ingredients, Packaging and Labeling:
<https://www.fda.gov/food/ingredientspackaginglabeling/>
 - FDA - Labeling and Nutrition:
<https://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/default.htm>
 - FDA - Changes to the Nutrition Facts Label
<https://www.fda.gov/Food/IngredientsPackagingLabeling/LabelingNutrition/default.htm>
 - FDA - Guidance Regulations
<https://www.fda.gov/Food/GuidanceRegulation/GuidanceDocumentsRegulatoryInformation/LabelingNutrition/ucm2006864.htm>
 - Department of Agriculture - Nutrition Policy and Promotion
<https://www.cnpp.usda.gov/>
 - Consumer Behaviors
<http://onlinemasters.ohio.edu/four-consumer-behavior-theories-every-marketer-should-know/>
 - Factors that Influence Consumers
<https://open.lib.umn.edu/principlesmarketing/chapter/3-1-factors-that-influence-consumers-buying-behavior/>

Slide 12

- Allow students time to share their research with other groups from the same perspective to compare and contrast details.
- Distribute the **Multiple Perspectives student handout**. Ask each team to share their research and any graphics, or photos with the class. As students listen, they should summarize how each perspective provides a unique insight into the development and interpretation of food label claims.

Slide 13

- Invite students to summarize their learning using the following guiding questions:
 - How would they describe misleading labels and claims to peers?

- How can an examination of an issue through multiple perspectives affect your understanding of food label claims?

Extension

Slide 14

- As an extension, students will redesign a food label and complete the **Designing a Food Label student handout**. Provide each student with a food label from a real product. Pass out the capture sheet and instruct students to complete their presentation notes on the front and their scaled-up drawing on the back.
- Key points to keep in mind about the food label redesign include:
 - Highlight what you consider to be the most “essential” nutritional information about that product.
 - Rework front of label claims to be straightforward and honest to consumers.
 - Consider the space constraints of the package that it will be placed on.
 - Provide the requisite information that needs to be included by law.
 - Students will present a scaled-up drawing of their label to the class and defend their changes. They will need to provide the actual dimensions of their food label in inches as well as the scale they used for their drawing. For more information on dietary guidelines and scientific research related to the nutritional needs of consumers, students can visit the Center for Nutrition Policy and Promotion at the U.S.

Food Label Claims

Use the categories below to sort your food label claims.

<p>Health Claims</p> <p>Describes a relationship between a food substance (a food, food component, or dietary supplement ingredient), and reduced risk of a disease or health-related condition.</p>	<p>Nutrient Content Claims</p> <p>Describes the level of a nutrient in the product, using terms such as free, high, and low, or they compare the level of a nutrient in a food to that of another food, using terms such as more, reduced, and lite.</p>	<p>Structure/Function Claims</p> <p>Describes the role of a nutrient or dietary ingredient intended to affect the normal structure or function of the human body OR characterize how a nutrient or dietary ingredient acts to maintain such structure or function.</p>	<p>Raised/Grown/Processed Claims</p> <p>Describes how the food was raised, grown, or processed for resale purposes. Many of these claims are regulated by the USDA and FDA, but new food label terms are constantly changing.</p>

Roles and Perspectives

Your role: _____
What are the interests of this person or group in regards to how food is labeled? Include three pieces of evidence.
How does your assigned community perspective provide a unique insight into how foods are labeled? Why do they have these interests?
How do these interests impact their perspectives on their position of food label claims?
What do they hope to accomplish? Why? What might the person or thing wonder about or question?
How do they try to gather support for their perspective?
How would they convince me to support their perspective?
How does thinking from this perspective affect your understanding of how food labels are created?

Multiple Perspectives

Review each perspective and summarize how each perspective provides a unique insight into the how food label claims are created and perceived.

Farmer/Rancher	Consumer
USDA/FDA governing agencies	Marketing
<p>How can an examination of an issue through multiple perspectives help us better understand an issue?</p>	

Designing a Food Label Capture Sheet

My food label name is _____

The actual dimensions of my food label will be: _____ inches x _____ inches

The scale for the drawing of my food label is: _____

Presentation Notes

Most “essential” nutritional information about the product

Space constraints based on package

Information required by law

Justifications for the changes made to my redesigned label:

Scaled-up drawing of redesigned food label:

