

Lesson 2.4: Native Foods Case Study

LESSON INTRODUCTION

Time Frame: Multiple class periods

Materials:

- Case Study: Cordelia’s Social Media [Notetaker](#)
 - Cordelia’s Social Media posts on [Padlet](#)
 - Or [printable](#) copies
- Case Study: Cordelia’s Food Blog [Activity Packet](#)
 - Nutrition Label [Infographic](#)
 - Food Blog Entry #2: [Nutrition Facts](#)
 - Cordelia’s [Neighborhood Map](#)
- Personal computers (optional)

Students use their understanding of nutrition to design a series of meals for a young person around their age. Students begin to consider issues around food access and provide advice about making healthy food decisions.

Teacher Background:

The beginning of this lesson introduces students to the design of a **nutritional label**. While not all foods, and especially many whole, indigenous foods included in a Native diet, will have a nutritional label attached, building student awareness of nutrition enhances their ability to make personal decisions regarding food.

The majority of this lesson asks students to read, analyze, and provide advice for a fictionalized teen, to whom many students may relate.

Cordelia, the case study subject, is a young girl who has just learned that her mother has **Type 2 Diabetes**. Grappling with the fact that diabetes is common in her community, and that the eating and lifestyle habits she shares with her mother may

increase her chances of getting Type 2 Diabetes herself, Cordelia begins to examine her own choices around food and exercise.

Over the course of the case study, students examine Cordelia's diet, learn about the major influences in her life, and make suggestions as to how Cordelia can begin to lead a healthier lifestyle.

ENGAGE

Guide students to **Cordelia's Social Media Posts on Padlet**.

Give students several minutes to browse through Cordelee_uhh's social media posts. Students may work in partners or individually.

OR

Distribute pre-printed **Cordelia's Social Media Posts** throughout the class, so that each student has one image.

Ask students to get out of their seats and move about the room when they hear music playing. Once the music stops, students pair up with the person closest to them. Students should be paired with someone with a different image than themselves, and that has an image they have not yet seen.

Provide students with the **Case Study: Cordelia Notetaker**. With their partner, have students share/discuss the posts and use the information to try to fill in answers for the questions on the notetaker.

Gathering Information questions:

1. **What kinds of snacks does this teen eat?**
2. **What kinds of exercise does this teen enjoy?**
3. **What kinds of activities does this teen do with their friends?**
4. **What food-related activities does this teen do with her family?**
5. **Where does this teen get most of her food?**
6. **What kinds of beverages does this teen enjoy?**

Wrap up:

1. **Describe Cordelia's eating habits.**

2. Describe Cordelia's interests and activities.

EXPLORE

Continue to introduce Cordelia to the class by reading her **Food Blog: Entries #1 & #2** with students.

The blog posts included in the case study have information about Cordelia's mother's health, Cordelia's relationship with her mother, and Cordelia's concerns about being at higher risk of developing diabetes due to her and her mother's eating habits.

Reference the **My Native Plate [activity](#)** information that students explored in the **previous lesson**. Students should continue to build an understanding of healthy eating and proportion control here.

EXPLAIN

Explain to students that, using the information they already know about nutrition and healthy eating, they are going to support Cordelia by designing a healthy food plan for her and her family.

First, ask students to identify the difference between:

1. **Whole foods vs. processed foods**
2. **Indigenous foods vs. introduced foods.**

Now, ask students:

3. Which types of foods are often the healthiest for us, and why?

Clarify for students that when designing a healthy meal, it is important to consider how many whole vs. processed foods are included, and of those foods, which ones are indigenous to our region, which ones have been introduced and may have been grown in a harmful way, and which ones have been imported from far away.

Based on our previous lessons, we know that meals with a majority of whole foods are best for our bodies, and that indigenous foods grown in a responsible way are the best for our environment.

Before learning more about Cordelia and designing her meal plan, students first need to know how to read a **nutrition label**.

Explain that most processed foods have a nutrition label attached to them, but some whole foods, like fresh, unpackaged fruits, veggies, and nuts, may not have a label. There are lots of nutrition apps and websites that do provide nutritional information for whole foods, with one included in this lesson.

Project and or hand out the **Nutrition Label infographic**.

Walk students through each annotated section, reviewing the purpose of each element.

ELABORATE

If students are not already partnered up, organize students into groups of 3.

Group members will work together to analyze the meals/snacks Cordelia listed in **Entry #2** of her Food Blog. Students may refer to the **Nutrition Label infographic**.

Students will use the **Food Blog Activity Packet** and the **Food Blog Nutrition Facts** to document their analysis of Cordelia's food choices for that day.

Each member of the group will be assigned one of the three pages of the **Nutrition Facts: Breakfast, Snacks, or Lunch/Dinner**. Once students finish their independent work, they should come together and add up the total servings of protein, grains, fruits, vegetables, and total calories, saturated fat, sodium, and added sugar for Cordelia's entire day.

As a class, have students determine whether Cordelia met, exceeded, or ate below the suggested servings for each category.

What else can you deduce from her eating habits?

EVALUATE

In their groups, guide students to **Entry #3: Making a Plan**.

Making a Plan asks students to use the **neighborhood map** to design an improved healthy eating plan for Cordelia. The plan encourages eating a wide variety of healthy foods that promotes whole and indigenous or local food options.

Have students read **Blog Post #3** and create a meal plan. Once students complete their meal plan, have students respond to Cordelia's **original blog post**, providing advice and reasoning as to how Cordelia can improve her nutrition and health.

VOCABULARY

Indigenous: Produced, growing, living, or occurring natively or naturally in a particular region or environment.

Food Sovereignty: To achieve independence in terms of the production and provision of food. Communities who achieve food sovereignty grow, distribute, and consume their own food from their own food sources.

Endangered Species: A species that is at risk of becoming extinct or completely disappearing.

Nutrition: Related to eating foods that provide the nutrients needed to live. Nutrients found in food and drink help provide energy to the body.

Indigenous Foods: Locally grown food that is originally from the area and has been eaten by Native people for thousands of years. Food is grown with no chemicals or pesticides; food is grown in just the right amount.

Settler/introduced Foods: Foods that come from other countries or from outside the local ecosystem. Foods are sometimes healthy and sometimes damaging to health. Sometimes these plants can harm the local ecosystem.

Processed Foods: Foods that have been altered or changed from their original form. They often have added flavors, or artificial substances added, and might taste much different than their original form.

Whole Foods: Foods that have very little, or no processing/have not been changed from their original form. Foods that do not have additives, or any artificial substances added.

STANDARDS

CA Health Standards:

- 1.1.N Describe the short- and long-term impact of nutritional choices on health.
- 1.2.N Identify nutrients and their relationships to health.
- 1.5.N Differentiate between diets that are health-promoting and diets linked to disease.
- 1.10.N Identify the impact of nutrition on chronic disease.
- 4.1.N Demonstrate the ability to use effective skills to model healthy decision making and prevent overconsumption of foods and beverages.
- 5.1.N Use a decision-making process to evaluate daily food intake for nutritional requirements
- 7.1.N Make healthy food choices in a variety of settings.

Common Core:

CCSS.ELA-LITERACY.RI.7.1

Cite several pieces of textual evidence to support analysis of what the text says explicitly as well as inferences drawn from the text.

CCSS.ELA-LITERACY.W.7.1

Write arguments to support claims with clear reasons and relevant evidence.

CCSS.ELA-LITERACY.SL.7.1

Engage effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grade 7 topics, texts, and issues, building on others' ideas and expressing their own clearly.

CCSS.ELA-LITERACY.SL.7.2

Analyze the main ideas and supporting details presented in diverse media and formats (e.g., visually, quantitatively, orally) and explain how the ideas clarify a topic, text, or issue under study.

CCSS.ELA-LITERACY.SL.7.4

Present claims and findings, emphasizing salient points in a focused, coherent manner with pertinent descriptions, facts, details, and examples; use appropriate eye contact, adequate volume, and clear pronunciation.

RESOURCES

- U.S. Food and Drug Administration. [*How to Understand and Use the Nutrition Facts Label.*](#)
- [*Indigenous Foods: A Path to Healthy Living.*](#) National Indian Council on Aging.
- [*The Impact of Historical Trauma on Health Outcomes for Indigenous Populations in the USA and Canada: A Systematic Review.*](#) Gone, J. P., et. al. 2019.
- [*Social Determinants of American Indian Nutritional Health.*](#) Donald Warne and Siobhan Wescott. 2019.
- [*The Importance of Historical Trauma & Stress as a Factor in Diabetes and Obesity Prevention among American Indian Adolescents*](#)
- [*Dietary Guidelines for Americans: 2020-2025*](#)
- [*USDA FoodData Central Nutritional Breakdown*](#)

Indigenous Recipe Inspiration:

- [*Sean Sherman's 10 Essential Native American Recipes*](#)
- [*IndigiKitchen Recipes*](#)

- [Native American Recipes: 25 of our All-Time Favorites](#)
- [10 Native American Recipes That You Should Totally Try at Home](#)