



**ELA Common Core Content Standards:**

Writing Standards 2

Speaking and Listening Standards 1, 3, 4

Language Standards 1, 2, 5, 6

**Estimated duration:** one 45 min. session, with extra time for art activities

**Goal:** Students will learn about how nutritional foods and physical exercise help their bodies keep healthy, and that gathering and eating Native Foods help prevent diet-related diseases.

**Teacher Background:** The prevalence of obesity and diet-related chronic disease is increasing in the United States, and the Native American population shows the most devastating rates of all ethnic groups. While the public's health is further threatened by rising antibiotic resistance; chemicals and pathogens contaminating our food, air, soil and water, the depletion of natural resources and climate change is negatively affecting the environmental health of our homelands. According to the American Public Health Association, "These threats have enormous human, social, and economic costs that are growing, cumulative, and unequally distributed. These issues are all related to food—what we eat and how it is produced."

In many parts of the United States, the industrial food system provides abundant, relatively inexpensive food. This is not the case in most areas that are highly populated by Native Americans. At the same time, much of the food commercially available is unhealthy, and the industrial food system is currently unsustainable. On the other hand, the traditional Native foods are replete with economic and environmentally sustainable healthy foods. Why, then, are Native peoples one of the poorest and most unhealthy ethnic populations in the country?

There are manifold reasons to explain the current situation: Our People's intimate and deep relationship to the landscape has been violently disrupted due to colonization and globalization. Land appropriation, the ban on traditional land management practices – especially on cultural burning, and forced assimilation into Western culture has driven many Native people from their traditional homelands. Even those who remain have limited access to

traditional foods and medicines. Additionally, the marginalization of Native cultures and the damage to traditional education through the Indian Boarding School Era have led to what is widely known as intergenerational trauma. And finally, the current threats posed by increasing frequency and scale of wildfire, continued drought conditions, pest and disease infestation have highly and negatively impacted access to Native foods, fibers and medicinal plants.

**Theme/Big Ideas:** We can be healthy!  
**Big Question:** How can we be healthy?  
**Vocabulary:** food pyramid, diabetes, diet

**Materials:**

**Food Pyramid** (included)  
**Karuk Fall Healthy Meal**, worksheet (included)  
**Food Picture Page** (included)

**Preparation:** Review lesson background and discussion points. Print out copies of all materials for each student and ensure that they will have access to scissors and glue.

**Discussion:** Ask students: how do people stay healthy? Write their ideas up on the board as bullet points. When they finish, ask if they agree with all that has been said, reading bullet points one by one from the board. Once they are all in agreement, ask them if they can group the ideas into main categories (Ideally, *diet* and *exercise* are included in the topic headings).

Tell students that long ago, the Native people of this region were some of the healthiest people in the world. Ask them if they know why (*suggested answers: Native foods are healthy, and harvesting those foods required a lot of physical exercise*). Tell students that today, American Indians are often unhealthy: for example, many have high rates of a disease called diabetes<sup>1</sup>. Ask them if they know what disease means. Ask them if they know what diabetes is (*suggested answer: it is a serious disease in which the body cannot properly control the amount of sugar in your blood*). Tell them that while a type of diabetes is preventable, the Native American children have been getting this disease more and more. Ask them if they can imagine why this is true (*suggested answer: Today, many Native Americans aren't eating healthy foods and getting enough exercise*).

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<sup>1</sup> See American Indian Health website: <https://americanindianhealth.nlm.nih.gov/eating.html> : “Native Americans suffer disproportionate rates of diet-related ills, such as hypertension and diabetes and are more than twice as likely to be diagnosed with coronary heart disease, government statistics show. American Indians and Alaska Natives are diagnosed with diabetes at rates more than twice as high as the general population — 16.1 to 7.1 percent, according to the Indian Health Service. Indigenous children between 10 and 19 have seen a 110 percent rise in adult-onset, or Type 2, diabetes in the last 20 years.

Tell students that they will learn about healthy diets. Does anyone know what that means? Ask them if they know about the Food Pyramid (*Suggested answer: a recommendation for balancing amounts of certain types of food in the human diet in order to maintain health*).

Project the **Food Pyramid** on a document reader. You may wish to point out that many people disagree about what makes a healthy diet, and that even western scientists change their minds every few years about what is and isn't healthy. Explain the food groups and the recommended daily amounts. Do they agree with these suggestions? Why and why not?

Ask students if they know which foods were eaten by the Native peoples of this area long ago (*suggested answers: **fish**, such as salmon, sturgeon, trout; **nuts**, such as hazelnuts, peppernuts, sugar pine nuts, and a variety of acorns; **meat**, such as deer, elk, wild turkey, grouse, quail, grey squirrels; **vegetables**, such as wild carrots, onions, Indian potatoes; **fruits**, such as huckleberries, salmon berries, madrone berries, and elderberries; **grains**, such as wild rye and wild oats; and **fats**, such as from animals, fish and nuts*).

Point out that the Karuk Traditional Food Pyramid looks very different from the one most Americans are used to: there aren't sections for dairy products, sweets and fats. Certain types of fats are very important for good health, but the fats eaten in a traditional diet are contained in food. For example, acorns and salmon are very nutritious, and they also contain high amounts of valuable fats. Another interesting fact is that the lowest portion of the food pyramid is only made up by a small portion of wild grains, but very heavy on acorns and Indian potatoes in the spring. Explain that while Karuk people eat acorn bread, that kind of bread is not considered a part of the grain section because the tan oak acorn is a type of nut.

**Preparation for Activity:** Tell students that they will paste pictures on a food pyramid that is an example of a typical, healthy fall Karuk meal. Remind students that Indigenous peoples traditionally eat seasonally, which means that the foods prepared are available at that time of year. Foods that have been dried and stored are also used.

**Activity:** Pass out the **Karuk Fall Healthy Meal** worksheet and the picture page (included) and have students cut out (if desired) the pictures, glue in those they think could be an example of a healthy meal. Have them trace the letters of the worksheet title and write their names on the top. Once they are finished, ask them to hold up the pictures that would NEVER belong in a traditional and healthy meal.

**Resources:** California Adolescent Nutrition and Fitness Program: <http://www.canfit.org>  
American Indian Health: <https://americanindianhealth.nlm.nih.gov/eating.html>

# Food Pyramid



Name: \_\_\_\_\_

# Karuk Fall Healthy Meal





