

# INDIAN EDUCATION FOR ALL

## GRADE LEVEL 7-12

### BUILDING AN APPRECIATION FOR NATIVE FOODS

Time to Complete: 2--45 minute periods (1 day for presentation, 1 day for cooking lab)

#### National Content Standards

- FCS 2.1.2: Examines how individuals and families make choices to satisfy needs and wants.
- FCS 2.1.3: Implements decisions about providing safe and nutritious foods for individuals and families.
- FCS 14.2: Evaluate the nutritional needs of individuals and families in relation to health and wellness across the life span.
- FCS 14.1.3: Compare the impact of psychological, cultural, and social influences on food choices and other nutritional practices.
- FSC 14.1.3: Examine the government, economic, and technological influences on food choices and practices.
- Indian Education for All Benchmarks: 2, 3, & 5

#### Family, Career, and Community Leaders of America (FCCLA)

- Chapter Service Project: Members could prepare traditional foods and
- Power of One: Members could build an individual nutrition plan.
- Student Body: Members could peer-education about traditional foods and their nutritional values.

#### Objectives

Upon completion of this lesson, students will be able to:

- Understand the importance of native foods for a balanced diet.
- Prepare a native dish using ingredients from the Four Winds Model.
- Appreciate the significance of native foods.

## DAY 1

#### Introduction

Anticipatory set: Provide students with a sample food from the four winds (i.e. berries, jerky).

(10 minutes)

- Ask the students what they believe Native Americans ate in the past, and brainstorm a list of the foods on the board.
- Ask students to discuss previous knowledge about Native Americans and their culture.

## Body

(20 minutes)

Presentation of “Traditional Foods” Video

- Ordering information can be found in “Resources” section below.

AND/OR

PowerPoint Presentation of “Building an Appreciation for Native Foods”

- PowerPoint can be found at [www.montana.edu/hhunts](http://www.montana.edu/hhunts).

### Power Point Script

Slide 1: Today we will be looking into traditional foods and the ways that Native Americans used a variety of foods to survive throughout each wind or season.

Slide 2: Throughout this lesson, there are three main goals for the students to accomplish. These include:

- Understand the importance of native foods in building a balanced diet.
- You will prepare a native dish using ingredients from the Four Winds Model.
- We hope that you will gain an appreciation for the significance of native foods.

Slide 3: The number one goal of this lesson is to preserve the past. Native Americans rely on many traditions to pass down their history.

- For instance, the Medicine Wheel is a sacred symbol used by Plains tribes and others. It is a symbol with numerous symbolic teachings related to balance in all natural systems. Its universal knowledge is looked to by many who seek healing, wisdom and direction. It was also used as a guide in life and gives direction to help one live at their full potential.
- The Four Winds Model uses this circular idea of balance to plan their diets. Today, we will look more in depth at the four winds model, and how the Indians used it to balance meals.
- Most widely known is the cultivation of the “Three Sisters” in the Northeast. Corn, beans and, squash are mainstays for most nations in the Americas. It is the womb of mother earth from which the Three Sisters emerge to provide sustenance to the people. In addition to planting, nurturing and harvesting the Three Sisters, women performed horticultural activities as well; this includes maintaining knowledge of herbs and their uses in both medicinal and culinary arts.”
- There is a belief that Native Americans are more efficient at storing fat than other people because of a thrifty gene. This gene was once an advantage during a feast and famine era.

Slide 4: (Can be skipped in classroom PowerPoint)

Slide 5: We will be focusing on the Four Winds Model. The Four Winds Model was designed for Northern Plains Nation Indians used to balance the hunter/gatherer diet. The model focuses on balance between Protein, Carbohydrates, and Fat. Water was also very crucial in these times and methods of cooking such as boiling, roasting, and steaming, which relied on water, were primarily used.

Slide 6: This is visual representation of the Four Winds Model. As you can see, they received water from the west, lean meats from the north, berries and roots from the east, and starchy vegetables from the south. Let us look more in depth at each of the winds.

Slide 7: The West Wind represents the western skies bringing thunder clouds which bring life giving rain. Pure water was believed to give people wellness and traditionally all drinks were water based.

Slide 8: The North Wind is represented by the strength and endurance of the Buffalo. Buffalo and large game animals, such as elk, deer, and moose, were plentiful and provided lean meat and also served as their source of protein.

Slide 9: The East Wind represents the dawn, and the opportunity to learn from a new day. It was the season of renewal, a time of new plant growth and the beginning of the gathering season. During this season, a variety of berries and roots were collected, dried, and stored for use throughout the year.

Slide 10: The South Wind is represented by the warm summer wind and the energy received from plants that require the long growing season. Some of these plants were corn, beans, potato, and squash and served as a source of starch. Turnips were often peeled, ground and then used like flour to form their bread product.

Slide 11: As explorers moved further to the west, many Indians were forced to move onto reservations.

- By the 1900s, many Indians were forced to adopt western European settlers' food ideas due to being given rations by the new United States government. This is the time when the famous Indian Fry Bread came to be. Flour, salt, and lard were some of these rations and the Native Americans formed round loaves, fried them, and used them for a variety of meals.
- By the 1940s and 50s, many Indians were forced into close quarters on the reservations and no longer had the ability to live off of the land. This forced many of them to purchase foods, many of which were processed foods, from grocery stores.

Slide 12: Many of their native ancestors only ate two times per day and still had an abundance of energy. Today, many Americans diet is very different than that of the native Indian and many Indians have also adopted this lifestyle.

- We often eat three or four times each day and portion sizes are much larger.
- Instead of having balance between each of the foods, starchy foods, such as bread and potatoes, often take up a majority of our plate.
- We tend to use much more fat and salt in cooking processes which show to play a role in heart disease in many people today.
- There is also a much lower activity level and with current food patterns, we have seen a major decline in health in recent years.

Slide 13: As you can see by this modern day Winds Model, we regularly select beverages, such as soda, that are high in sugar and not water-based. We often select processed meats such as hot dogs and sausage. These are poor sources of protein and also contain a greater amount of fat and sodium. We frequently rely on canned or frozen

fruits and vegetables, which often have lowered nutrient contents due to their processing. Lastly, we allow grains to crowd our plate, which provide much more carbohydrates than is needed.

Slide 14: We can all use the Four Winds Model to plan our daily menus. Here are a few tips to keep balance in your diet.

- Enjoy foods in moderation. While it is very pleasurable to eat sweet or fattening foods, we must all remember to eat them in small portions.
- Be sure to balance your meal with all four components from the model: Water, Meat, Non-starchy Vegetable, and a Starch/Grain.
- It is always important to live an active lifestyle.

### Conclusion

(10 minutes)

- Review the list of Native American foods, add new ideas and mark out incorrect ones.
- Discuss the importance of traditional foods in the Native American diet.
- Ask the youth what they have learned today and if they would try native foods again.

## DAY 2

### Introduction

(5 minutes)

- Briefly review what was learned from the presentation on day 1.

### Body

(30 minutes – 60 minutes) Times will vary depending upon recipe.

#### Cooking Lab

- Each group will be given a recipe.
  - The following is a list of possible recipes included below:
    - All Winds/Summer Sisters Stew: <http://www.recipezaar.com/163108>
    - All Winds/Buffalo Stew: <http://www.recipezaar.com/164399>
    - West Wind/Peppermint tea: <http://www.recipezaar.com/164850>
    - South Wind/Fry Bread: <http://www.recipezaar.com/187124>
    - East Wind/Fruit Pemmican: <http://www.recipezaar.com/139318>
    - North Wind/Moosemeat: <http://www.recipezaar.com/164559>
  - Note: If the lesson plan is opened in a Word document, pressing “Ctrl” and selecting a blue recipe website from above, will navigate you to the online cookbook. To learn more about an individual ingredient (starting on page 5) Press “Ctrl” and select any of the blue, underlined ingredients in the recipes.
- Everyone will read the instructions together and have the opportunity to ask questions.
- Each group will be given a recipe
- Youth will get out all of the supplies needed.
- Youth will prepare the dish following the directions.
- While the dishes are cooking, youth will clean up the kitchen and dishes.
- When the dishes are done, students can eat a sample of each.

## Conclusion

(5 minutes)

- While sampling each dish, each group will discuss how their recipe fits into the Four Winds Model.

## Assessment

- Students will be provide a written response (space provided on bottom of recipe) and will discuss how their recipe fits into the Four Winds Model with the class.
  - Teachers may want to give students time to do research on the foods and how Native Americans used them in their diet. Then have them give oral reports.
- Students will be assessed on their productivity during the lab and quality of dish prepared.
- Students will journal about the importance of native foods.

## Resources

MSU Extension Service and MT Dept. of HHS Video: “Traditional Foods: A Native Way of Life” To order, send \$14.95 to: MSU Extension Publications, PO Box 172040, Bozeman, MT 59717-2040 or call (406) 994-3273 to order by credit card.

Kibbe Conti, RD from Oglala Sioux Tribe, *Native Roots*. Retrieved from [http://www.tribalconnections.org/health\\_news/native\\_roots/april2004p1.html](http://www.tribalconnections.org/health_news/native_roots/april2004p1.html)

Recipes from <http://www.recipezaar.com>

## Alternate Resources

Information about Native American Diets

<http://www.faqs.org/nutrition/Met-Obe/Native-Americans-Diet-of.html>

Information about the Medicine Wheel


[http://www.spiritualnetwork.net/native/medicine\\_wheel.htm](http://www.spiritualnetwork.net/native/medicine_wheel.htm)

Information about the “Three Sisters”

[http://www.theorganicreport.com/pages/519\\_the\\_three\\_sisters\\_corn\\_beans\\_and\\_squash\\_activities\\_for\\_the\\_classroom.cfm](http://www.theorganicreport.com/pages/519_the_three_sisters_corn_beans_and_squash_activities_for_the_classroom.cfm)

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

## Summer Sisters Stew Recipe

 45 min 15 min prep

- 1 1/2-2 cups cooked [kidney beans](#)
- 2-2 1/2 cups rinsed chopped [mushrooms](#)
- 1-1 1/2 cup [frozen corn kernels](#),  
defrosted
- 2-2 1/2 cups cut yellow squash  
ounce) can [diced tomatoes](#),  
drained
- 1 large [potato](#), diced
- 1 large [onion](#), diced
- 1/2 teaspoon [black pepper](#)
- 1/2 teaspoon [sage](#)
- 1/4 teaspoon [thyme](#)
- 1/2 teaspoon [rosemary](#)
- 1/2 teaspoon [oregano](#)
- 2-4 [bay leaves](#)
- 1/4 teaspoon [salt](#)
- 1 tablespoon [olive oil](#)
- 2-3 [garlic cloves](#), minced

### DIRECTIONS

1. Heat half the spices, garlic, and olive oil in a large pot, Sauté the onions in the mixture for 2-4 minutes.
2. Add 2-4 cups of water and allow to come to a boil.
3. Add the potatoes and the other half of the spices, simmer for 5 minutes.
4. Add corn, tomatoes, and beans. Allow to simmer for 2-5 minutes.
5. Add squash and mushrooms. Slow to simmer for 10-30 minutes, until cooked to desired tenderness and melding of flavors.

### How does this recipe fit into the Four Winds Model?


Be prepared to discuss during out taste test at the end of the class period.

<b>Nutrition Facts</b>	
Calculated for <b>1 serving</b> (583g) Recipe makes 4 servings	
<b>Calories 274</b> Calories from Fat 43 (15%)	
Amount Per Serving	%DV
<b>Total Fat</b> 4.8g	<b>7%</b>
Saturated Fat 0.7g	3%
Polyunsat. Fat 0.9g	
Monounsat. Fat 2.8g	
Trans Fat 0.0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 591mg	<b>24%</b>
<b>Potassium</b> 1271mg	<b>36%</b>
<b>Total Carbohydrate</b> 51.4g	<b>17%</b>
Dietary Fiber 9.8g	39%
Sugars 8.7g	
<b>Protein</b> 11.4g	<b>22%</b>
Vitamin A 275mcg	5%
Vitamin B <sub>6</sub> 0.8mg	39%
Vitamin B <sub>12</sub> 0.0mcg	0%
Vitamin C 45mg	76%
Vitamin E 1mcg	3%
Calcium 104mg	10%
Magnesium 90mg	22%
Iron 3mg	21%



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

## Buffalo Stew

 1 hour, 18 min prep

- 2 stalks [celery](#), cut 1 inch long
- 1 (12 oz) can [stewed tomatoes](#)
- 2 lbs buffalo stew meat, cut into 1 inch cubes
- 4 quarts [water](#)
- 2 lbs red potatoes or [white potatoes](#) (not russets)
- 1 cup [barley](#)



### DIRECTIONS

1. Brown the buffalo cubes on high heat until seared about 3 min.
2. Add 4 quarts of water, potatoes and carrots and boil until veggies are tender.
3. Add stewed tomatoes and celery and barley cook an additional 5 minutes.
4. Remove from heat and place into baking dish.
5. Bake at 425 degrees for 30 minutes.
6. Remove from oven and enjoy.


Note: this stew tastes really great, you can use elk or bear or even rabbit in place of buffalo.

**How does this recipe fit into the Four Winds Model? Be prepared to discuss during out taste test at the end of the class period.**

<b>Nutrition Facts</b>	
Calculated for <b>1 serving</b> (1332g)	
Recipe makes 4 servings	
<b>Nutrition Facts 2 lbs buffalo stew meat are not included in data below:</b>	
<b>Calories 364</b>	
Calories from Fat 13 (3%)	
Amount Per Serving	%DV
<b>Total Fat</b> 1.5g	<b>2%</b>
Saturated Fat 0.3g	1%
Polyunsat. Fat 0.7g	
Monounsat. Fat 0.2g	
Trans Fat 0.0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 256mg	<b>10%</b>
<b>Potassium</b> 1405mg	<b>40%</b>
<b>Total Carbohydrate</b> 79.7g	<b>26%</b>
Dietary Fiber 14.2g	56%
Sugars 6.5g	
<b>Protein</b> 11.3g	<b>22%</b>
Vitamin A 264mcg	5%
Vitamin B <sub>6</sub> 0.9mg	42%
Vitamin B <sub>12</sub> 0.0mcg	0%
Vitamin C 52mg	87%
Vitamin E 0mcg	2%
Calcium 100mg	10%
Magnesium 136mg	34%
Iron 4mg	26%

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

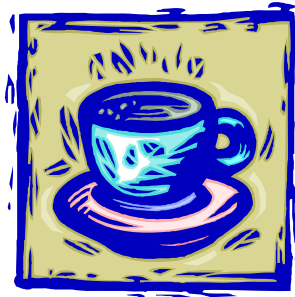
## Wild Peppermint Tea

 37 min, 7 min prep

- 1/2 cup dry peppermint leaves
- 3-4 cups very hot [water](#)
- 2-3 tablespoons [honey](#)

### Directions

1. Boil about 3 or 4 cups of water.
2. Add the peppermint leaves and shut the heat off.
3. Let the tea steep for about 5 minutes.
4. Pour through a tea strainer.
5. Add the honey and pour into cups.
6. The tea can be made from fresh leaves or dried leaves.




### How does this recipe fit into the Four Winds Model?

Be prepared to discuss during out taste test at the end of the class period.

<b>Nutrition Facts</b>	
Calculated for <b>1 serving</b> (191g)	
Recipe makes 4 servings	
<b>Calories 34</b>	
Calories from Fat 0 (0%)	
Amount Per Serving	%DV
<b>Total Fat</b> 0.0g	<b>0%</b>
Saturated Fat 0.0g	0%
Polyunsat. Fat 0.0g	
Monounsat. Fat 0.0g	
Trans Fat 0.0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 4mg	<b>0%</b>
<b>Potassium</b> 23mg	<b>0%</b>
<b>Total Carbohydrate</b> 9.1g	<b>3%</b>
Dietary Fiber 0.3g	1%
Sugars 8.6g	
<b>Protein</b> 0.2g	<b>0%</b>
Vitamin A 135mcg	2%
Vitamin B <sub>6</sub> 0.0mg	0%
Vitamin B <sub>12</sub> 0.0mcg	0%
Vitamin C 1mg	1%
Vitamin E 0mcg	0%
Calcium 11mg	1%
Magnesium 4mg	1%
Iron 0mg	1%

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

## Moosemeat: One Dish Meal

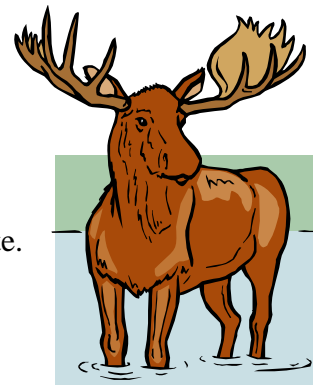
 46 min, 16 min prep

- 1 1/2 lbs moose, cubed (or steak)
- 4 teaspoons [soya sauce](#)
- 1 [onion](#), chopped
- 3 tablespoons oil
- 1/2 cup uncooked [rice](#)
- 1 cup [water](#) (or stock of your choice)
- 1 (12 ounce) can cream of mushroom soup
- 1 (12 ounce) can sliced mushrooms
- 1 cup [peas](#)
- salt and pepper

<b>Nutrition Facts</b>	
Calculated for <b>1 serving</b> (505g)	
Recipe makes 4 servings	
<b>Calories 491</b>	
Calories from Fat 153 (31%)	
Amount Per Serving	%DV
<b>Total Fat</b> 17.0g	<b>26%</b>
Saturated Fat 3.2g	15%
Polyunsat. Fat 5.7g	
Monounsat. Fat 5.7g	
Trans Fat 0.0g	
<b>Cholesterol</b> 100mg	<b>33%</b>
<b>Sodium</b> 1002mg	<b>41%</b>
<b>Potassium</b> 1044mg	<b>29%</b>
<b>Total Carbohydrate</b> 37.2g	<b>12%</b>
Dietary Fiber 3.8g	15%
Sugars 6.3g	
<b>Protein</b> 46.5g	<b>92%</b>
Vitamin A 345mcg	6%
Vitamin B <sub>6</sub> 0.3mg	13%
Vitamin B <sub>12</sub> 0.0mcg	0%
Vitamin C 16mg	26%
Vitamin E 3mcg	10%
Calcium 42mg	4%
Magnesium 80mg	20%
Iron 8mg	48%

### Directions

1. Brown meat, onion and celery in oil in frying pan.
2. Transfer to casserole dish.
3. Mix remaining 9 ingredients together in a bowl.
4. Pour over meat and bake at 350 degrees for 20 to 30 minutes, or until rice is cooked.
5. Add veggies of your choice, diced small, and herbs/spices to taste. This can be cooked in Slow Cooker all day....meat is tenderer.
6. Serve with bannock bread or baking powder bisquits.




### How does this recipe fit into the Four Winds Model?

Be prepared to discuss during out taste test at the end of the class period.

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

## Fruit Pemmican

 30 min, 10 min prep

- 3/4 cup dried apricots
- 3/4 cup [pine nuts](#)
- 3/4 cup [raisins](#)
- 3/4 cup [sunflower seeds](#)
- 1/2 cup dried apples
- 2 [eggs](#), beaten
- 1 1/2 cups [fresh strawberries](#) or [frozen strawberries](#)
- 1/3 cup [brown sugar](#) or [blueberries](#)
- 1/2 cup [flour](#)



### Directions

1. Preheat oven to 375 degrees.
2. Put apricots, apples, raisins, pinenuts, and sunflower seeds in a food processor or grinder.
3. Process until apricots and apples are in fine pieces and nuts are ground fine.
4. Transfer mixture to a bowl and add remaining ingredients.
5. Mix well and spoon into a buttered 9 X 13 baking dish.
6. Bake 30 minutes.
7. Cut into bars.


### How does this recipe fit into the Four Winds Model?

Be prepared to discuss during out taste test at the end of the class period.

<b>Nutrition Facts</b>	
Calculated for <b>1 bars</b> (56g)	
Recipe makes 16 bars	
<b>Calories 167</b>	
Calories from Fat 75 (45%)	
Amount Per Serving	%DV
<b>Total Fat</b> 8.4g	<b>12%</b>
Saturated Fat 0.9g	4%
Polyunsat. Fat 4.5g	
Monounsat. Fat 2.1g	
Trans Fat 0.0g	
<b>Cholesterol</b> 26mg	<b>8%</b>
<b>Sodium</b> 14mg	<b>0%</b>
<b>Potassium</b> 267mg	<b>7%</b>
<b>Total Carbohydrate</b> 21.6g	<b>7%</b>
Dietary Fiber 2.3g	9%
Sugars 14.3g	
<b>Protein</b> 4.1g	<b>8%</b>
Vitamin A 256mcg	5%
Vitamin B <sub>6</sub> 0.1mg	5%
Vitamin B <sub>12</sub> 0.1mcg	1%
Vitamin C 8mg	14%
Vitamin E 4mcg	13%
Calcium 25mg	2%
Magnesium 49mg	12%
Iron 1mg	8%

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

# Navajo Fry Bread

 30 min 10 min prep

- 4 cups [flour](#)
- 1 tablespoon [baking powder](#)
- 1 teaspoon [salt](#)
- 2 tablespoons [powdered milk](#)  
(optional)
- 1 1/2 cups [water](#), warm  
[powdered sugar](#), honey,  
chokecherry sauce



## Directions

1. Combine dry ingredients in a large mixing bowl.
2. Add water to make a soft dough, knead lightly.
3. Make 1 inch balls of dough and roll / pat into flat circle (a tortilla shape) 1/4 inch thick.
4. Heat shortening in a frying pan until very hot. If you flick a drop of water into the oil and it makes that popping noise, you'll know its hot)
5. Gently place dough into oil and cook until both sides are golden brown.
6. Sprinkle fried bread with powdered sugar and drizzle honey of the top.
7. Serve hot.

## How does this recipe fit into the Four Winds Model?

Be prepared to discuss during out taste test at the end of the class period.

<b>Nutrition Facts</b>	
Calculated for <b>1 serving</b> (87g) Recipe makes 12 servings	
<b>Calories 152</b> Calories from Fat 3 (2%)	
Amount Per Serving	%DV
<b>Total Fat</b> 0.4g	<b>0%</b>
Saturated Fat 0.1g	0%
Polyunsat. Fat 0.2g	
Monounsat. Fat 0.0g	
<i>Trans</i> Fat 0.0g	
<b>Cholesterol</b> 0mg	<b>0%</b>
<b>Sodium</b> 285mg	<b>11%</b>
<b>Potassium</b> 44mg	<b>1%</b>
<b>Total Carbohydrate</b> 32.1g	<b>10%</b>
Dietary Fiber 1.1g	4%
Sugars 0.1g	
<b>Protein</b> 4.3g	<b>8%</b>
Vitamin A 0mcg	0%
Vitamin B <sub>6</sub> 0.0mg	1%
Vitamin B <sub>12</sub> 0.0mcg	0%
Vitamin C 0mg	0%
Vitamin E 0mcg	0%
Calcium 91mg	9%
Magnesium 9mg	2%
Iron 2mg	11%