UNIT 4
CARIBOU/REINDEER
Itxayax (E)/Itxaygi (A)
Unangam Tunuu

To hear how these words are pronounced in Unangam tunuu, go to the Aleutian Pribilof Islands Association, Inc. website (www.apiai.org) audio recordings can be found under the Head Start tab. In addition, Head Start classrooms have audio card readers with many Unangam tunuu words utilized in the curriculum. A glossary of Unangam tunuu is located in the appendix of this curriculum.

Caribou/Reindeer ......................... It disponíveis (E)/It disponíveisgi (A)

Land .............................................................. Tana (E/A)

“To hunt or fish for food; subsistence” ....... Qaqamig (E/A)

Use Unangam tunuu during:

- Harvest Poster Activity
- Recipe and Nutrition Activity
- Coloring Pages
- Flash cards and labeling items in the classroom
Introduction to Caribou/Reindeer

Caribou/reindeer are members of the deer family. In Alaska, domesticated caribou are called reindeer, but they are actually the same species.

Caribou naturally range on the treeless tundra and mountains of the Aleutians from Unimak Island east. There are no indigenous land mammals on any of the Aleutian Islands west of Umnak Island; however, reindeer and other land animals have been introduced by humans. In the early 1900s, reindeer were introduced to many of the islands in the region including Atka, St. Paul, St. George, Umnak, and Unalaska. In 1958, caribou were introduced on Adak.

Caribou/reindeer are hunted on land. Sometimes hunters use boats to find caribou/reindeer herds in more remote areas of the islands. Caribou/reindeer can be hunted year round; however, the meat is said to taste better at certain times of the year, such as early fall or late spring when they have more fat on them.

Main Points:

- Caribou/reindeer are members of the deer family.
- Caribou/reindeer have been introduced to many of the Aleutian and Pribilof Islands.
- Caribou/reindeer eat plants, mushrooms, and lichen.

Use introductory information during:

- Harvest poster activity
- Recipe and nutrition activity
- Coloring pages
Caribou/Reindeer Harvest Poster

Discussion Questions:

The caribou/reindeer harvest poster may be used to introduce the caribou/reindeer unit. Using the poster, group discussion questions may include:

- What is happening in this drawing?
- Why do caribou/reindeer live in a herd? (safety)
- Why is caribou/reindeer fur so thick? (It keeps them warm when it is cold outside)
- How is the Unangan (E)/Unangas (A) value “to hunt or fish for food; subsistence” - Qaqamiiñgu (E/A) shown in the picture?
- Where would you look for a caribou/reindeer? (tundra and mountains)
- Are caribou/reindeer on all of the Aleutian Islands? (No- they were introduced only on some of the islands in the past)
- What are some ways you can prepare reindeer meat? (stew, soup, stir fry, dried meat, and burgers)
- What do caribou/reindeer eat? (grass, plants, and lichen)

Unangam Tunuu:

- How do you say “caribou/reindeer” in Unangam tunuu? Itñayax (E/Itñayxi (A)
- How do you say “land” in Unangam tunuu? Tana (E/A)
Caribou/Reindeer Nutritional Information

Caribou/reindeer meat is an excellent source of low-fat protein. Caribou/reindeer meat has about twice as much protein as the same amount of hot dogs or chicken nuggets. Why do we need protein? We need to eat foods with protein every day. Protein helps build muscles and organs. It also helps repair and replace muscles and organs, so that our body can keep playing longer and growing stronger. Protein also helps little cuts heal.

Why do we need vitamins? Caribou/reindeer is also packed with many B vitamins, which help convert the food we eat into energy. Caribou/reindeer is also a source of vitamin A. The liver is extremely high in vitamin A. Vitamin A helps keep our skin, bones, and teeth healthy.

Caribou/reindeer meat contains other important nutrients for our bodies known as minerals. Many minerals are found in caribou/reindeer, such as iron. Why do we need iron? Our bodies use iron to transport oxygen from our lungs to the rest of our body. One 3 ounce serving of caribou/reindeer provides 19 percent of our daily need for iron.

Caribou/Reindeer meat is a source of:
- Protein
- Vitamins (A & B)
- Minerals

Nutrient highlight: PROTEIN

Compare the difference in protein between caribou meat and other foods (3-ounces each). (USDA, 2012)
Caribou/Reindeer and Cabbage Recipe

Caribou/reindeer meat can be fried, roasted, dried, boiled, or ground up and used like hamburger. The meat can also be made into a delicious soup or stew. The best parts of the caribou are considered to be the ham, or hind quarters, and the rump part for roasting. This recipe for Caribou/Reindeer and Red Cabbage is a nutritious way to prepare the meat. Caribou/reindeer meat is an excellent source of protein as it is low in fat. The additional vegetables in this recipe make it even more nutritious. Foods that are nutritious are healthy for our bodies.

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>DIRECTIONS</th>
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<tbody>
<tr>
<td>4 pounds + 4 ounces caribou/reindeer meat, ground, raw</td>
<td>1. In skillet, combine caribou/reindeer, diced onion, garlic powder, and water.</td>
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<td>2 ¾ cup onion, finely diced</td>
<td>2. Brown meat mixture over medium heat, stirring occasionally, until liquid is evaporated and meat is fully cooked and crumbly. CCP: Heat to 165° F or higher for 15 seconds.</td>
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<tr>
<td>1 teaspoon garlic powder</td>
<td>3. In a large casserole dish, combine meat mixture, cabbage, onion, tomato sauce, tomato paste, beef broth, apple cider vinegar, salt, pepper, garlic, thyme, and rice. Cover tightly with foil.</td>
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<td>1 quart water</td>
<td>4. Bake: Conventional oven: 400° F for 1 hour; CCP: Heat to 165° F or higher for 15 seconds; CCP: Hold for hot service at 135° F or higher.</td>
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<td>3 gallons + 3 quarts red cabbage (or green), shredded</td>
<td>5. Serve: 1 ½ cups (3 No. 8 scoops) per plate.</td>
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<tr>
<td>2 quarts onion, diced</td>
<td></td>
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<tr>
<td>3 quarts + 3 cups tomato sauce</td>
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<tr>
<td>3/4 cup tomato paste</td>
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<tr>
<td>1 quart + 2 ½ cups beef broth</td>
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<tr>
<td>½ cup + 2 teaspoons apple cider vinegar</td>
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<tr>
<td>2 tablespoons + 1 teaspoon salt</td>
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<tr>
<td>1 teaspoon black pepper</td>
<td></td>
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<tr>
<td>2 tablespoons + 1 teaspoon garlic powder</td>
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<tr>
<td>1/2 teaspoon thyme, dried, ground</td>
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<tr>
<td>2 quarts + 1 cup brown rice slightly undercooked</td>
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</tbody>
</table>

Makes 25 servings (serving size: 1 1/2 cups; provides 2 ounces meat, 2 ounces whole grain, and 1 cup of vegetable per USDA, CACFP meal pattern). Recipe from “Make it Local: Recipes for Alaska’s Children” (Dawson, Hackenmuller, & Lampert)
Nutrition Activity

Materials needed:
- Meat grinder
- Large bowl
- Large skillet for meat mixture
- Knife
- Grater
- Cutting board
- Measuring cups
- Measuring teaspoon and tablespoon
- Large casserole dish that fits all ingredients (or pan with high edges may be substituted)
- Small sampling spoons- 3 for each student
- Ingredients for Caribou/Reindeer and Cabbage (see recipe)

Directions:

1. Have students wash their hands.

2. Cut up pieces of caribou/reindeer meat and put through grinder.
   - Students can take turns grinding the meat in the grinder. This must be done with supervision.
   - Which food group does caribou/reindeer meat belong to? (protein)
   - How many “white ribbons” (strips of fat) do you see on the meat?
   - Caribou/reindeer are very lean sources of protein. What does the word “lean” mean? Why is protein good for our bodies?
   - What is the word for “caribou/reindeer” in Unangam tunuu?

3. Place ground meat in the skillet.

4. With students watching, finely dice the onions. Have the students measure the onions. Add onion to ground meat in the skillet.
   - Why are onions often added to a recipe? What is the difference between dicing and chopping?

5. Have students help measure garlic powder and water, and then add ingredients to skillet.

6. Brown meat mixture over medium heat, stirring occasionally, until liquid is evaporated and meat is fully cooked and crumbly. CCP: Heat to 165° F or higher for 15 seconds. Use thermometer as meat can turn brown even though it is not fully cooked.
7. While meat is browning, students can help prepare remaining ingredients to be added to meat mixture.

8. Shred cabbage and dice onions.
   - Have students help measure cabbage and onions then place into large casserole dish.
   - What other foods have you eaten that contain cabbage? Why is cabbage healthy for our bodies?

9. Have students help measure out remaining ingredients and add to casserole dish: tomato sauce, tomato paste, beef broth, apple cider vinegar, salt, pepper, garlic, thyme, and rice.
   - Have students identify each ingredient being placed into pan. What do these ingredients taste like? Using small sampling spoons, allow students to taste small amounts of tomato sauce, beef broth, and apple cider vinegar. What do they think of the taste?

10. Add browned caribou/reindeer meat mixture to ingredients in casserole dish.

11. Cover tightly with foil.

12. Bake as in recipe directions: 400° F for 1 hour; CCP: Heat to 165° F or higher for 15 seconds; CCP: Hold for hot service at 135° F or higher.

13. Serve. Each 1 ½ cup serving meets CACFP requirements for 2 ounces of protein, 1 cup of vegetables, and 2 ounces of grain. Place equal portions of Caribou/Reindeer and Cabbage dish on each table in the classroom. Encourage each student to serve themselves 1 ½ cups.

Group discussion questions:

While students are seated and sharing prepared recipe, topics to discuss include:

- What did you like best about making caribou/reindeer and cabbage recipe?
- Why is the caribou/reindeer recipe healthy?
- What are some other healthy ways you could prepare caribou/reindeer?
- Have you ever helped or seen someone process a caribou/reindeer?
Activity Extensions

CREATE

- Create or teach a traditional song or dance about caribou/reindeer.
- Create caribou/reindeer tracks in the actual size for students to color. Have students cut them out and compare the size with their feet.

INVITE

- Invite a family member to visit the classroom and tell a caribou/reindeer hunting story. Bring some of the tools that might be needed for hunting (no guns or other weapons).
- Invite someone to the classroom to teach Unangam tunuu words related to caribou/reindeer.
- Invite a family member to the class to help prepare a traditional food recipe. Please see section labeled Volunteers on page 7 for guidance on having volunteers prepare food with students.
- Invite someone to the classroom to demonstrate how to butcher a caribou/reindeer, and learn about the different parts of the animal.

SHOW

- Show students the Traditional Harvest Poster. Discuss the appropriate harvesting method and/or tool utilized to acquire the traditional food.
- Show a caribou/reindeer antler and allow the students to touch the antler(s). Ask students what the difference is between antlers and horns. Do they think the antlers are heavy or light? What are the antlers used for by the caribou/reindeer?
- Show students a piece of caribou/reindeer hide and allow students to feel it. Talk about the different ways the hide can be used (clothing, blanket, and shelter).

See APIA website (www.apiai.org) under the Head Start tab for additional teaching resources related to traditional foods, such as: nutrition graphs, Unangam tunuu audio glossary, and digital stories.
Itḵayax (E)/Itḵaygiḵ (A)
Caribou or Reindeer
Dear Family,

In this unit, we will study about caribou/reindeer found in the Aleutian and Pribilof Islands Region and their nutritional value. The unit may include a group activity where we prepare a recipe using caribou/reindeer. Information for this unit has been adapted from the book, “Qaqamiigux: Traditional Foods and Recipes from the Aleutian and Pribilof Islands.”

The Head Start Program welcomes and encourages your participation in the classroom and your child’s education. Please consider volunteering your time in the classroom for this unit. Contact Head Start staff to:

- Visit the classroom and share a caribou/reindeer hunting story.
- Visit the classroom to teach Unangam tunuu words related to caribou/reindeer.
- Help prepare a traditional food recipe.
- Teach a traditional song or dance about caribou/reindeer.
- Bring in a caribou/reindeer to butcher so students can learn about different parts of the animal.
- Bring in a piece of caribou/reindeer hide or antlers and have students feel it. Talk about the different ways the hide or antlers can be used.

**Request for Donations of Food**

☐ We do not need any foods donated for this unit.

☐ We are requesting donations of food for this recipe.

We are in need of _______ (amount) of _____________________ (type of food) in order to prepare the following recipe in class: __________________________________________.

*Note that any donated wild game meat must be whole, in quarters, or roasts. No burger or ground meats. Please note that all donations must be determined safe for human consumption. You may be asked questions regarding how the meat was butchered, dressed, transported, and stored to prevent contamination, undesirable microbial growth, or deterioration.*

*Hunters must also fill out a Transfer of Possession Form when donating any wild game meats. This can be found on the Alaska Dept. of Fish and Game website: http://www.adfg.alaska.gov/static/regulations/wildliferegulations/pdfs/transfer.pdf*

Thank you! Qagunakan (E); Qagaalakux (Pribilofs); Qagaasakuq (A)
Caribou/Reindeer recipe to try at home:

Caribou Stew
Recipe from King Cove Women’s Club, 1999 (King Cove Women’s Club, 1999)

Ingredients
2 to 3 pounds caribou stew meat, cut into bite-sized pieces
[2 tablespoons shortening or oil]
1 can stewed tomatoes
1 large onion, diced
2 tablespoons celery flakes
Salt and pepper to taste
1 can carrots
3 medium potatoes, diced
1 can string beans
Worcestershire, to taste

Directions
Brown meat in pot with 2 tablespoons shortening or oil. Add onions, celery flakes, salt, pepper, tomatoes, and juices from the canned vegetables and cook on low heat for 1 ½ hours. Then add carrots, potatoes, and beans. Cook for another 15 to 20 minutes.


Nutritional Information about Caribou/Reindeer:
Please help reinforce the nutritional information about caribou/reindeer with your child during this unit.

Caribou/Reindeer is a rich source of:

- **Protein** - helps build muscles and organs and repair them.
- **Vitamins (A & B)** - B vitamins help give our bodies energy. Vitamin A helps keep our skin, bones, and teeth healthy.
- **Minerals (iron)** - our bodies use iron to transport oxygen from the lungs to the rest of the body.

**Nutrition Fact:**
Caribou/reindeer meat has about twice as much protein as the same amount of hot dogs or chicken nuggets!

Compare the difference in protein between caribou meat and other foods (3-ounces each).

![Protein Comparison Chart](USDA_2012)