UNIT 5
PLANTS
Tanam chngangin (E)
Hitnisas (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.

Plants ...................... Tanam chngangin (E)/Hitnisas (A)
Mossberry or Crowberry ............. Qaayux (E)/Aangsuš (A)
Highbush blueberry .............................. Unignaš (E)
Lowbush blueberry .............................. Unxiidgiš (E)
Salmonberry ............................. Alagnaš (E)/Buruskaš (E/R)
Lowbush cranberry .............................. Kiikaš (E)
Petrushki or beach lovage ...................... Pitruuskaš (E/R)
Cow parsnip or putchki ...... Saaqudaš (E/A)/Taağan’giš (A)
Chocolate lily .............................. Saranaš (E/R)/Alugaš (A)
Land .............................................................. Tanaš (E/A)
Outside .............................................................. Sadang (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 Plants

There are a variety of wild, edible plants in the Aleutian and Pribilof Islands Region. Many of these plants have important nutrients, such as vitamins and fiber. In the past, plants were an important part of the diet for the Unangan (E)/Unangas (A) as well as a source of medicine to treat many illnesses. Today, the use of plants is limited mostly to berries, petrushki, putchki, and a few edible greens, though some people still harvest plants for medicinal purposes.

Main Points:
- There are many wild, edible plants in the region.
- Plants are a healthy source of food for our bodies, providing vitamins and fiber.
- Some plants can be used for medicine.

Use introductory information during:
- Harvest poster activity
- Recipe and nutrition activity
- Coloring pages
Plant Harvest Poster

Discussion Questions:

The plant harvest poster may be used to introduce the plant lesson. Using the poster, group discussion questions may include:

- What is happening in this drawing?
- How is the Unangan (E)/Unangas (A) value “take care of the land” – Tuman tanaetàgliisaaxtan (E)/Tanaetàgliisada (A) shown in this picture?
- When can you pick different berries? (July-November)
- What are some ways you can use berries? (pies, jam/jelly, smoothie, cereal)
- What is your favorite berry or plant to eat?

Unangam tunuu

- How do you say “mossberry” or “crowberry” in Unangam tunuu? Qaayux (E)/Aangsu (A)
- How do you say “land” in Unangam tunuu? Tana (E/A)
- How do you say “outside” in Unangam tunuu? Sadang (E/A)
Plants and Berries
Nutritional Information

Berries and some plants are a rich source of vitamins. Our bodies need vitamins to grow healthy and strong. Vitamins protect our bodies from damage. Each vitamin has its own special job in our bodies. Many berries contain vitamin C. Why do we need vitamin C? Vitamin C helps keep our gums and muscles in good shape, and it helps us not get sick. One cup of blueberries provides half of the daily need for vitamin C.

In the past, wild plants, berries, and seaweed were the main sources of fiber in the Unangan (E)/Unangas (A) diet. Berries are a rich source of dietary fiber. Why do we need dietary fiber? Dietary fibers are carbohydrates that cannot be digested. They are present in all plants that are eaten, including berries. Fiber helps our body break down foods and helps us go to the bathroom. Eating foods high in dietary fiber can help make us feel full, and it may help reduce the risk of getting overweight.

Nutrient highlight: FIBER

All of the fruits shown here are considered rich sources of fiber. One half cup of mossberries provides 10% of the daily value* for fiber. This is the same amount of fiber as...

- 6 orange slices
- a little less than one banana
- ¼ small apple
- small handful of raisins

*% Daily Value is the amount of a nutrient you need each day (based on a 2000-calorie diet). (USDA, 2012)
Berry Smoothie Recipe

A variety of berries can be harvested from the Aleutian and Pribilof Islands Region including: blueberries, mossberries, salmonberries, nagoonberries, lowbush cranberries, and cloudberries. Mossberries, blueberries, and salmonberries are the most commonly harvested berries.

Berries are typically picked from July until early November. Buckets of berries are collected and used in jams, jellies, pies, and other recipes.

Berry smoothies are a healthy snack that can be used with any type of berry. Smoothies are easy to prepare and can be made with berries that have been washed and frozen.

<table>
<thead>
<tr>
<th>INGREDIENTS</th>
<th>DIRECTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>12 ½ cups 1% or fat-free milk</td>
<td>1. Peel the bananas and cut into slices.</td>
</tr>
<tr>
<td>8 ripe fresh or frozen bananas (about 4 cups)</td>
<td>2. Divide the ingredients into thirds. In the blender, put 4 cups milk, about 2 ½ bananas, and about 3 cups of berries.</td>
</tr>
<tr>
<td>8 ½ cups fresh or frozen blueberries, mossberries, or salmonberries</td>
<td>3. Turn on the blender and mix until frothy.</td>
</tr>
<tr>
<td>3 cups or more, ice cubes</td>
<td>4. Add 1 cup of ice cubes.</td>
</tr>
<tr>
<td></td>
<td>5. Mix until ice is blended.</td>
</tr>
<tr>
<td></td>
<td>6. Pour into tasting cups.</td>
</tr>
<tr>
<td></td>
<td>7. Repeat two more times with remaining ingredients.</td>
</tr>
</tbody>
</table>

Makes 25 servings (serving size 1/25, provides 1/2 cup fruit per USDA, CACFP meal pattern. Provides 1/2 cup milk per serving).
Nutrition Activity

Materials needed:

- Ingredients for Berry Smoothie (see recipe)
- Blender
- 3 medium sized bowls (one bowl for each: berries, bananas, and ice)
- Spoons for each bowl
- Large pitcher for milk
- Colander
- Measuring cup(s)
- Knife
- Plastic knives- one per student
- Cutting board
- Paper towels

Directions:

1. Have students wash their hands.

2. For each student, you will need approximately ½ cup milk and ½ cup of fruit (mix of berries and bananas). Include extra berries and bananas for sampling. For a class size of 10, you may need 3-4 bananas and about 4 cups of berries.

3. Fill a bowl with ice cubes (about 2 ice cubes per student).

4. Fill a pitcher with milk (1/2 cup milk per student).

5. Divide the class into groups of 3-4 depending on the class size. Allow each group to help the teacher or cook rinse the berries using the colander.
   - Why is it important to rinse the berries?

6. Place the berries in a bowl with spoon.

7. Slice bananas. If using fresh bananas, students can help slice them using plastic knife with supervision. Teachers can slice frozen bananas.
   - Talk about knife safety. What is the proper way to use a knife?

8. Place sliced bananas in a bowl with spoon.

9. Give each student a few berries to sample on a paper towel or napkin.
   - What kind of berry is it? How many berries do they each have?
   - Have the students describe the berries (i.e., shape, color, and seeds).
Berries have vitamin C. Why is vitamin C good for our bodies?

Berries also have fiber. Why is fiber good for our bodies?

What is the word in Unangam tunuu for the berry you are using?

10. Give each student a few banana slices to sample on a paper towel or napkin.

- Have the students describe the banana slice.
- Which fruit is sweeter- the berries or the banana?
- How are the fruits similar? How are the fruits different?
- Bananas are a source of vitamins and fiber.

11. Using a measuring cup, have each student fill ½ cup with a combination of berries and banana slices. Then, add mixture to blender.

- Ask students which fruit they prefer more- bananas or berries?

12. Assist each student with measuring and adding ½ cup of milk to blender.

- Why is milk healthy for our bodies? (calcium-strong bones)

13. When blender is half full, mix until frothy.

14. Have each student add 2 ice cubes to blender.

15. Mix until ice is blended.

16. Divide portions of the smoothie into child sized pitchers. Assist children in pouring the smoothie from the blender into their own cup.

17. Repeat with remaining students.

Group discussion questions:

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

- What did you like best about making the berry smoothie recipe?
- Why is the berry smoothie recipe healthy?
- What are some other healthy ways you could prepare berries?
- Does anyone have a berry picking story?
Activity Extensions

CREATE
- Create a special berry pie, jelly, or jam.
- Create or teach a traditional song or dance about plants.
- Create dyes from berries and plants. Use them to paint drawings.
- Create a berry patch in the classroom using drawings of berries. Have student color berries, cut out, and place on wall to make berry patch. Count berry patches.

COLLECT
- Collect local plants, press, and dry them. Create a plant book.
- Collect edible tea leaves and make tea. Have a tea party. Invite elders.

INVITE
- Invite a family member to visit the classroom and talk about collecting different plants and berries. Bring some of the items that might be used to harvest the plants.
- Invite someone to the classroom to teach *Unangam tunuu* words related to plants.
- Invite someone to take a walk with your class and share knowledge about plants and how different plants are used.
- 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 family on a berry picking field trip with students.

SHOW
- Show students the Traditional Harvest Poster. Discuss the appropriate harvesting method and/or tool utilized to acquire the traditional food.
- Show and describe to students the different parts of plants (roots, stem, leaves, and petals).

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.
Saaqudaḵ (E/A)/Taaḵaŋ’giḵ (A)
Cow Parsnip, Wild Celery, or Putchki
Saranaň (E/R)/Alugaň (A)

Chocolate lily
Unignač (E)
Highbush blueberry

Unxiidgič (E)
Lowbush blueberry
Dear Family,

In this unit, we will study about plants and berries 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 plants/berries. Information for this unit has been adapted from the book, “Qaqamiigû: 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:

- Discuss collecting different plants and berries. Bring some of the items that might be used to harvest the plants.
- Visit the classroom and teach Unangam tunuu words related to plants.
- Help prepare a traditional food recipe or make tea.
- Coordinate a walk with students and Head Start staff, and teach students to identify plants or coordinate a field trip for berry picking.
- Teach a traditional song or dance about plants.

Unangam Tunuu

Plants ...Tanam chngangin (E)
Hitnisas (A)

Audio recordings of these and other Unangam tunuu words can be found on APIA’s website at www.apiai.org under the Head Start tab. In addition, each Head Start classroom has an audio card reader with recordings of these words.

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: __________________________________________________.

Plants, berries, and other foraged foods are welcomed as donations. Plants and aquatic plants should be donated in their gathered form, either fresh or frozen. This means that they should not be mashed, jarred, or made into jam or jelly. Please note that all donations must be determined safe for human consumption. You may be asked questions regarding how the plants/berries were collected, transported, and stored to prevent contamination, undesirable microbial growth, or deterioration.

Thank you! Qaغاasakung (E); Qaغاalakuฎ (E-Pribilofs); Qaغاasakuฎ (A)
Plant recipe to try at home:

**Salmonberry Cobbler**
*Recipe by: Lori, Janice, and Linda Gregory (Unalaska Aleut Development Corporation, 1984)*

**Ingredients**
- 3 cups salmonberries or blueberries
- 1 cup flour
- 1 cup sugar
- 2 teaspoons baking powder
- \(\frac{1}{8}\) teaspoon salt
- 1 cup milk
- ½ cup butter

**Directions**
Mix together flour, sugar, baking powder, and salt; then stir in the milk. Melt butter in a 9-inch square pan. Pour batter over melted butter in pan. Do not stir. Put berries on top of flour mixture. Do not stir. Bake at 400 degrees for 30 minutes.

**HEALTHY SUBSTITUTION**
Instead of sugar – try: in most baked goods, you can reduce the amount of sugar by one-half; intensify sweetness by adding vanilla, nutmeg, or cinnamon.


---

**Nutritional Information about Plants:**

Please help reinforce the nutritional information about plants with your child during this unit.

**Plants and berries are sources of:**

- **Carbohydrates (dietary fiber)** - fiber helps our body digest or break down foods, and it helps us go to the bathroom.
- **Vitamin C** - helps keep our gums and muscles in good shape, and it helps us not get sick.

**Nutrition Fact:**
Eating foods high in dietary fiber can help make us feel full, and it may help reduce the risk of getting overweight.

**FIBER**

All of the fruits shown here are considered rich sources of fiber. One half cup of mossberries provides 10% of the daily value* for fiber. This is the same amount of fiber as...

- \(\frac{1}{2}\) cup mossberries
- a little less than one banana
- 6 orange slices
- \(\frac{3}{4}\) small apple
- small handful of raisins

*% Daily Value is the amount of a nutrient you need each day (based on a 2000-calorie diet). (USDA, 2012)