

DESCRIPTION

Students will work in teams to create posters on the key concepts presented throughout the previous lessons with a focus on the 'ĀINA Food Guide and close to the source foods. Student teams will present their posters to the entire class, complete a review sheet, participate in making and tasting a close to the source snack comprised of all of the food groups, and create their own Simple Snack Recipe.

TIME: 45 minutes

SUBJECTS: Health, Language Arts

LEARNING OBJECTIVES

After this lesson students will be able to:

- Identify close to the source foods as a component of good health.
- Classify food into groups: fruits & vegetables (Protective Foods), complex carbohydrates (Energy Foods), protein & calcium foods (Body-Building Foods); high quality fats (Brain Foods), and foods high in fat, sugar and sodium (Caution Foods).
- Utilize the 'ĀINA Food Guide to provide close to the source examples from each food group and their main health benefits.

ACADEMIC STANDARDS*

HCPS III: HE.K-2.1.3, HE.K-2.1.5, HE.K-2.7.1,
LA.2.1.4, LA.2.6.1

*A detailed list of the Academic Standards can be found in the Unit Overview document.

LESSON OUTLINE

- I. Introduction (2 minutes)
- II. Team Poster Making (15 minutes)
- III. Team Presentations (15 minutes)
 - Protective Foods / Fruits & Vegetables
 - Energy Foods / Complex Carbohydrate
 - Body-Building Foods / Protein & Calcium
 - Brain Foods / High Quality Fats
 - Caution Foods / Sugars, Fat & Sodium
- IV. Close to the Source Snack (10 minutes)
 - Poi Smoothies Demonstration & Tasting
- V. Closing (3 minutes)



KEY TERMS AND CONCEPTS

Body-Building Foods – Foods containing protein and calcium that help us to grow

Brain Foods – High quality fats and oils that help us to learn and remember things; also good for our hearts

Caution Foods – Foods high in sugar, fat, or salt that should be limited in our diet

Close to the Source Foods – High quality whole foods that come straight from nature; less processed and usually more nutritious than processed foods

Energy Foods – Complex carbohydrates such as whole grains and starchy fruits and vegetables that provide long-lasting energy

Protective Foods – Fruits & vegetables that are high in vitamins, minerals, phytonutrients, and fiber; protect us from getting sick



LESSON MATERIALS

Core Supplies:

- ‘ĀINA In Schools apron with name tag
- Kōkua Hawai‘i Foundation cloth bag
- Laminated ‘ĀINA Food Guide Poster
- Copy of ‘ĀINA In Schools Student Workbook
- Can opener
- Cutting board
- Non-latex gloves
- Napkins
- Garbage/compost bag

Lesson Supplies:

- ‘ĀINA Food Group Signs (5): Protective, Energy, Body-Building, Brain, Caution Foods
- Large poster paper (5 sheets per class)
- Disposable tasting cups (3-4 oz.)
- Extension cord

Teaching Team to Provide:

- Crayons and markers for poster making
- Tablecloth
- Blender
- Serving tray (or use top of bin as tray)
- Snack ingredients: apple bananas (locally grown), frozen organic blueberries, poi, organic soy milk (unsweetened vanilla), coconut milk, honey (locally produced), Ice*

*Ice may be obtained from the cafeteria if arranged ahead of time or on your way to the school. Crushed ice is best.



ACCOMPANYING DOCUMENTS

- ‘ĀINA Food Guide
- Student Worksheet: ‘ĀINA Key Concepts
- Take Home Letter: Poi Smoothie Recipe
- Student Worksheet: ‘ĀINA Recipe Challenge
- Student Worksheet: Reflection

The form is titled '‘ĀINA RECIPE CHALLENGE' and includes fields for Name, School, Teacher, and Grade. It contains instructions for students to create a recipe inspired by their ‘ĀINA lessons, choosing from Protective, Energy, Body-Building, and Brain categories. It also includes a table for listing ingredients with columns for Name of Ingredient, Amount, and ‘ĀINA Food Guide Category.

INGREDIENTS:		
Name of Ingredient	Amount	‘ĀINA Food Guide Category

‘ĀINA Recipe Challenge
 Student Worksheet

ADVANCE PREPARATION

- Lead docent to contact teachers to confirm date/time of the lessons.
- Ask teachers to have crayons/markers available for student use during lesson.
- Review lesson content, roles and shopping needs with docent team.
- Shop for snack ingredients and review materials needed for lesson.

CLOSE TO THE SOURCE SNACK

POI SMOOTHIE

This recipe includes close to the source ingredients from each food group of the ĀINA Food Guide: Protective (banana & berries), Energy (poi), Body-Building (soy milk), Brain (coconut milk), and Caution (honey).

Fill blender with ingredients in this order:

- 2 ripe locally-grown bananas
- 2 cups frozen organic blueberries
- 1 cup poi
- 2 cups organic soy milk (unsweetened vanilla)
- 1/4 cup coconut milk
- 1 Tablespoon Hawaiian honey
- 1 cup crushed ice

Place all ingredients in a blender and cover. Blend until well combined and smooth.

Makes approximately 1 blender full (15 3-ounce servings)

Poi Smoothie recipe adapted from: Armitage, K. and Odom, S.K., Hāloa, Kamehameha Schools 2006



INGREDIENT QUANTITIES NEEDED (SEE RECIPE ABOVE FOR EACH BLENDERFUL)

Based on 3 oz. servings:

How much to buy	Up to 15 students	Up to 30 students	Up to 45 students
Poi	8 oz.	16 oz.	24 oz.
Bananas	2 bananas	4 bananas	6 bananas
Blueberries (frozen)	2 cups	4 cups	6 cups
Soy milk (low fat)	16 fl. oz.	32 fl. oz.	48 fl. oz.
Honey	1 Tbsp.	2 Tbsp.	3 Tbsp.
Coconut milk	One 13 oz. can (use 1/4 cup)	One 13 oz. can (use 1/2 cup)	One 13 oz. can (use 3/4 cup)
Crushed ice	1 cup	2 cups	3 cups

REVIEW OF LESSON KEY CONCEPTS

In Lesson 8 students will review key concepts learned from all the previous lessons by creating presentations on close to the source foods from each food group in the ‘ĀINA Food Guide. Here is a quick review of the lessons:

LESSON 1: ‘ĀINA IS...a Foundation for Good Health

Students identified close to the source foods as a component of good health and used the ‘ĀINA Food Guide to classify foods into five food groups including: Protective (Fruits & Vegetables), Energy (Complex Carbohydrates), Body-Building (Protein & Calcium), Brain (High Quality Fats) and Caution Foods (Foods high in sugar, fat, or salt).



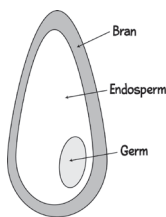
LESSON 2: Protective Plant Parts

Protective Foods are fruits and vegetables that are high in vitamins, minerals, phytonutrients, and fiber. They help keep us healthy and protect us from getting sick. Students identified all six plant parts (roots, stems, leaves, flowers, fruits & seeds) and their purpose. Students discussed the role edible plant parts have in keeping people healthy and pledged to eat a rainbow of at least five servings of vegetables and fruits every day.



LESSON 3: Whole Grain Investigators

Energy Foods are complex carbohydrates like whole grains and starchy fruits and vegetables that give us long-lasting energy. Students explored the parts of a whole grain: bran, germ, and endosperm and discussed the health benefits of eating whole grains. Students defined the term “processing” and read labels to identify close to the source energy foods made with whole grains.



LESSON 4: Food Choices for Your Environment

Students recognized the ahupua‘a system as a sustainable food system that fostered environmental stewardship. Students evaluated the environmental impacts of different modern day food systems and identified the nutritional benefits of eating locally grown foods. Students compared different food systems and described the interdependent relationships between our food systems, health and the environment.



LESSON 5: Food to Grow On

Body-Building Foods contain both protein and calcium, and come from both plants and animals. They include foods like beans, eggs, fish, lean meats, tofu, and dark greens. They help us grow healthy and strong bones, muscles, teeth, and hair. Students explored how body-building foods that contain protein and calcium are important to their health. Students identified and sorted close to the source animal and plant body-building foods into protein-only, calcium-only or protein and calcium categories using a Venn Diagram.



LESSON 6: Food for Thought

Students defined high quality fats as those that are beneficial to our bodies and brains and usually come from plants and fish. Students identified low quality fats as those that can harm our bodies and generally come from land animals. Students discussed the health benefits to the brain of eating high quality fats then identified and sorted different foods containing fats into high and low quality fat categories.



LESSON 7: Label Detectives

Caution Foods are foods high in sugar, fat, or salt. We should eat them in moderation and choose “close to the source” options whenever possible. Students explored caution foods and investigated the food label ingredients list to determine whether or not a food is close to the source. Students identified red flag ingredients such as hydrogenated oils, added salt, added sugars and artificial colors and flavors and discussed the negative health effects of consuming foods high in these red flag ingredients.



INTRODUCTION

2 MINUTES

“Hello, we are... (docent names)”

“This is our last ‘ĀINA In Schools Nutrition Lesson of the year! We have explored many different topics: the importance of eating close to the source, protective foods, energy foods, body-building foods, brain foods, caution foods, and the environmental impacts of our food choices.”

“In our last lesson we investigated Caution Foods. Who remembers what CAUTION means?” Entertain a few student answers.



“CAUTION means beware or slow down.”

Ask the students, “Why do you think the CAUTION FOODS are over there on the side on a smaller plate of the ‘ĀINA Food Guide?”

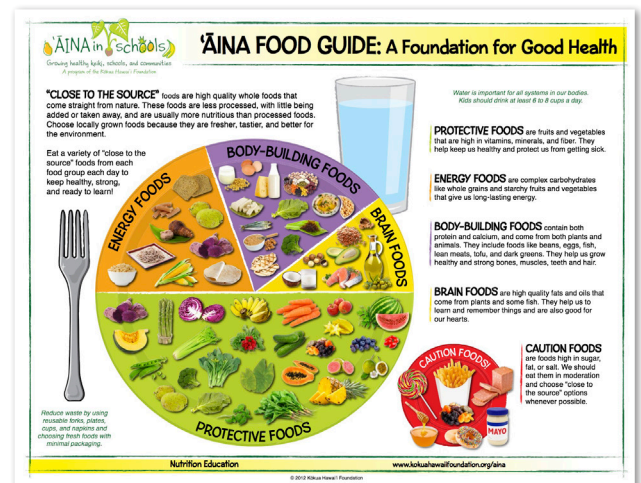
“CAUTION FOODS are on the side plate because we need to slow down and be careful not to eat too many CAUTION FOODS. We need to eat them in moderation (only sometimes and in very small amounts) and we should choose CLOSE TO THE SOURCE options whenever possible to stay healthy.”

“The ‘ĀINA Food Guide illustrates how foods are grouped into categories based on the different things they can do for our bodies. It gives us examples of the different kinds of foods we should be eating each day to grow healthy and strong. It also shows us examples of foods we should be careful not to eat too much of.”

“Raise your hand if you remember how many food groups there are in the ‘ĀINA Food Guide.”

Desired answer: Five food groups.

“There are five food groups and you are each going to become experts in one of these categories and then share what you know with the rest of the class. Since you have done such a great job in this year’s ‘ĀINA lessons, today we’re going to let you do the teaching!”



‘ĀINA Food Guide

TEAM POSTER MAKING

15 MINUTES

DOCENT NOTES

- Write out the team member roles on the classroom’s white board.
- All team members should take part in the presentation to the class and contribute to poster making and planning.
- The ‘ĀINA Food Guide Poster can be posted on the whiteboard for easy reference.
- A color copy of the ‘ĀINA Food Guide is on the inside front cover of each student workbook.

Break the class up into 5 teams and assign them an ‘ĀINA food group by giving them one of 5 ‘ĀINA Food Guide reading cards and a piece of paper for their posters. Instruct the teams to get out some of their markers/crayons to use in designing their posters.

Explain that each team will give a 2 minute presentation about their ‘ĀINA Food Group. Teams will have 15 minutes to prepare their posters and presentations, which will include:



- Introducing themselves and the name of their food group (Protective, Energy, etc.),
- How their food group keeps us healthy,
- Examples of close to the source foods from their food group,
- Each team member’s favorite close to the source food from their food group,
- The poi smoothie ingredient(s) from their food group, and
- The Fun Part: a pose or dance move that best expresses the importance of your team’s food group.

Once teams are sitting together, instruct them to give an assignment to each team member:

- Lead Writer
- Lead Illustrator
- Lead Choreographer
- Lead Chef (Docents, please select a Chef if needed)

Instruct teams to read about their team’s food group and look at its section in the ‘ĀINA Food Guide. They should think of their favorite foods in that group and get creative to come up with a pose or dance move that symbolizes their food group.

Circulate and help guide student teams in creating posters with colorful drawings and words to define the qualities of their food group.

Remind the teams that each team member should take part in the presentation. Make sure students take turns reading and presenting the items on their ‘ĀINA Food Group Card. Remind the students that their presentations will be limited to 2 minutes.



Preparing for Smoothie Making

After the first 10 minutes of this poster making time, call the “Lead Chef” from each group and have them wash their hands. Provide them instructions on how they will help prepare the smoothie in front of the class prior to team presentations. Reinforce with each, which ingredient they will be representing for their food group.

If teams are done with preparing for their presentations, they may work on their ‘ĀINA Key Concepts Student Worksheet in the workbooks.

TEAM PRESENTATIONS

15 MINUTES

Have each team present their poster to the class.

Student teams can use the ĀINA Food Guide Cards as an additional visual aid.

Have student teams present in the following order, keeping presentations to 2 minutes maximum:

- PROTECTIVE FOOD
- ENERGY FOOD
- BODY-BUILDING FOOD
- BRAIN FOOD
- CAUTION FOOD

After each presentation, briefly touch upon the relative proportions of each section of the food guide:

“Which food group makes up the biggest proportion of the ĀINA Food Guide?” Desired answer: The PROTECTIVE FOOD GROUP! Vegetables and fruits should make up the biggest part of our diet so we can stay healthy.



“Look at the BRAIN FOOD section. Do you think we need a lot of these fats?” Desired answers: No, not really, etc.



“We can eat smaller amounts of these high quality fats than the rest of the foods groups, but they are still very important for growing healthy brains and learning.”



“And what about CAUTION FOODS? Should we eat a lot of those?”

Desired answer: No! We eat CAUTION FOODS in moderation.

Thank the students for their presentations.

DOCENT NOTES

- Assistant Docent: Begin making the poi smoothie and pouring into cups during this activity.
- Prepare just enough so that you can make a final batch with the “Lead Chefs” in front of the class.



CLOSE TO THE SOURCE SNACK

10 MINUTES

DOCENT NOTES

- Point out that anyone with a known allergy to any of the food items should not touch or sample it. By this age, kids should know this about themselves, but please bring it to the attention of the teacher who can make sure that any students with known allergies or intolerances do not receive snacks.
- As much as possible, include students in preparing the snack.
- Add the poi last so the blender doesn't get jammed.
- You may use the Lesson Supply Bin lid as a serving tray.
- Give a snack to the teacher and any other classroom aides.
- Please refrain from verbalizing your own food preferences and be aware of your body language and facial expressions. These subtle cues have a big impact on a child's willingness to try foods!
- Encourage the students to try the snack. Remind them of the "no yuck" rule: they can choose not to try any foods they wish, but if they do try them, they must keep their personal opinions to themselves.

After the last team presentation call up all the "Lead Chefs" from each team to assist with making the smoothie. One by one, have the "Lead Chefs" tell the name of their ingredient, which 'ĀINA Food Group it is from and it's health benefits. Each student will add their ingredients in this order:

- Bananas & Berries – PROTECTIVE FOOD – fruit with vitamins, minerals, phytonutrients, and fiber that keep us from getting sick
- Soy milk – BODY-BUILDING FOOD – a protein and calcium food that help us grow
- Coconut milk – BRAIN FOOD – a high quality fat that helps us learn and remember things
- Honey – CAUTION FOOD - natural, close to the source sugar to add a little sweetness!
- Poi [made from kalo (taro)] – ENERGY FOOD – a complex carbohydrate that provides long lasting energy



Add crushed ice and blend until smooth. Pour into small tasting cups and serve to the students.

As the chefs are making the smoothie, remind the class that this is a simple, close to the source snack that includes ingredients from all groups of the 'ĀINA Food Guide.

Blend until smooth, and pour into small tasting cups. Thank your helpers and have them sit down.

As the students are tasting their smoothie, remind the students that they are tasting a close to source snack they can make at home with their families.



‘ĀINA VIDEOS

Check out the 'ĀINA Videos for discussions on key concepts and directions to make the 'ĀINA Close to the Source Snacks:
kokuahawaiifoundation.org/ainavideos

CLOSING

3 MINUTES

“Let’s quickly review what we learned this year in our ‘ĀINA In Schools Nutrition Classes. We learned about:”

- **PROTECTIVE FOODS** - Fruits and vegetables that are high in vitamins, minerals, phytonutrients, and fiber that protect us from getting sick
- **ENERGY FOODS** – Complex carbohydrates that provide long lasting energy
- **BODY-BUILDING FOODS** – Protein and calcium foods that help us to grow
- **BRAIN FOODS** – High quality fats that help us to learn and remember things
- **CAUTION FOODS** – Foods high in sugar, fat, or salt that we can enjoy sometimes, in small amounts
- **CLOSE TO THE SOURCE** – High quality whole foods that come straight from nature; less processed and usually more nutritious than processed foods
- **THE IMPACTS OF OUR FOOD CHOICES** – Our food choices are important for our health and the health of our environment.

Describe the take-home letter and follow-up activities:

- Students have a take-home letter to share with their family. The letter includes a link to a survey; families should fill it out to share what they think about the ‘ĀINA In Schools Program.
- Recipe Challenge: Encourage students to use what they’ve learned in our ‘ĀINA In Schools Lessons create a recipe for the with their family! Students may use the ‘ĀINA Recipe Challenge form at the end of their ‘ĀINA Nutrition Student Workbooks to share their creations. Kōkua Hawai'i Foundation will select recipes to feature in future blog posts, newsletters, and cookbooks.
- Reflection Worksheet:
- Teachers may have students complete the ‘ĀINA Key Concepts Student Worksheet and Reflection Worksheet as classwork or homework.

Thank the students for doing such a great job!

THANK YOU!



DOCENT NOTES

- **Pack your trash!** Please leave the classroom cleaner than you found it by removing all lesson-based trash. We don’t want to add any burden or extra trash for the teachers or custodians so please do not throw away any trash in the classroom garbage. Instead:
 - Collect napkins and any leftovers.
 - Banana peels may be composted if composting is available at the school.
 - Use the garbage bag in the Lesson Supply Bin to remove all lesson-related food items from the classroom.
- Please do not leave any food in the supply bin. Perishable props have been known to get moldy and smelly when left in the bin after the last lesson.
- Please complete your online docent survey for this lesson. This is valuable feedback that helps to improve our program.
- Please collect student recipe submissions regularly and turn in to KHF staff or ‘ĀINA Team Coordinator if applicable.
- Ask Teachers to save and submit samples the year-end Reflection Worksheet to Kōkua Hawai'i Foundation.