

**Outline of Lesson
You're the Chef: Bean Wraps
Unit 2, Lesson 4
Grade 4-5**

Lesson Time: 60 Minutes

Lesson Outline:

- 1. Trivia Review and Hand Washing**
 - Trivia game reviews past lesson concepts
 - Proper hand washing techniques
- 2. Kitchen Safety**
 - Healthy Person Contract: safe food-handling practices
 - Cooking tools and safe food-handling practices
- 3. Cooking: Bean Wraps**
 - Follow a recipe and work in teams to make a snack
 - Recipe Chant: learn the nutrients in the Bean Wraps recipe
- 4. Homework: Take 'n' Teach**

Student Learning Objectives:

By the end of this lesson students will:


- Have practiced safe food handling practices.
- Have prepared and tasted a healthy snack that they can teach to their family at home.
- Know how Vitamin A, Vitamin C, fiber and protein help keep their bodies healthy.

References:

- Teachers College, Columbia University. [LiFE: Linking Food and the Environment](#). Module 3, Lesson 16. 2002.

You're the Chef: Bean Wraps

Overview (for Teacher)

Pre-Class Preparation	None
Teacher Involvement During Class 	<ul style="list-style-type: none">• Conduct Trivia Game activity while cooking teams are hand washing and during clean-up.• Write Kitchen Behaviors on Healthy Person Contract.• Participate actively in Recipe Chant.• Work with cooking teams.• Assist with behavior management of students
Post-Class Teacher Responsibilities	<ul style="list-style-type: none">• Assign Take 'n' Teach Project as homework assignment to be returned with adult signature <i>(This assignment may be completed with assistance of another adult in the school community, after school program, etc.)</i>. <p>Classroom Tasting Challenge: One week after making the <u>Bean Wraps</u> in class, ask students to raise their hands to show you how many students made the recipe at home. Record the number of students who raise their hands in the appropriate column on your Classroom Tasting Challenge checklist, out of the total number of students in class that day. If possible, write the number of adults who made the recipe with your students on the checklist next to the row for that recipe.</p> <p>Note: For teachers working with CHANGE program educators, make sure you record this information to support grant requirements.</p>
Vocabulary	<p><u>Review from lessons 1-3</u></p> <p>Healthy- to be fit and well, and not be sick.</p> <p>Nutrient- food component needed by people, animals, and plants to stay healthy and strong. Proteins, carbohydrates, fats, water, minerals, and vitamins are all nutrients.</p> <p>Fruit- the fleshy juicy product of a plant that contains one or more seeds and is usually edible.</p> <p>Vegetable- a plant grown to be used as food.</p> <p>Amino Acids- building blocks to protein. Our body makes 11 and we have to eat 9 more to make protein in our bodies.</p> <p>Protein- a nutrient found in food that is made up of amino acids. Protein is one of the building blocks of a cell.</p> <p>Cell- one of the tiny units that carry on the basic functions of life.</p> <p>Variety- a wide selection of different things.</p> <p>Vegetarian- someone who eats only plants, plant products and sometimes dairy and eggs.</p>

Vegan- someone who eats only plants and plant products (no meat, fish, eggs or dairy).

Tissue- a mass of similar cells that form a particular part or organ of an animal or a plant. Example: muscle tissue.

Furrow- a shallow little row in the soil for planting seeds.

Indent- to make a shallow dent in something.

Germination- the time when a sprout and a root begin to emerge from a seed.

Soil- the home for plants. It is where plants grow and receive all of their nutrients.

Mineral- a substance found in nature that plants and people need to stay healthy.

Absorb- to soak up something, like a sponge absorbs water.

Microorganism- a living thing that is too small to be seen without a microscope.

Critical Thinking Activity	Take 'n' Teach
Supplementary Activities	Student Assessment
Web Resources	None
Suggested Books for Reading in the Classroom	None

You're the Chef: Bean Wraps

EALR & GLE Alignment

EALR	GLE	Lesson Applications
<p>Health and Fitness</p> <p>1.4 Understand the relationship of nutrition and food nutrients to physical performance and body composition</p> <p>2.1 Recognize patterns in growth and development</p> <p>3.3 Use social skills to promote health and safety in a variety of situations</p>	<p>1.4.1.a Identify how bodily functions and physical performance are affected by food consumption</p> <p>2.1.1.c Describe the influence of nutrition on health and development</p> <p>3.3.1 Applies appropriate social skills to keep out of trouble and resist pressure from others</p>	<p>The following apply to all Health and Fitness GLEs:</p> <ul style="list-style-type: none"> • Cooking: Bean Wraps
<p>Communication</p> <p>1.1 Focus attention</p> <p>1.2 Listen and observe to gain and interpret information</p> <p>3.1 Use language to interact effectively and responsibly with others</p> <p>3.2 Work cooperatively as a member of a group</p>	<p>*GLE not available at this time</p>	<ul style="list-style-type: none"> • Trivia Review • Cooking: Bean and Greens Tortilla Wraps • Homework: Take 'n' Teach • Cooking: Bean Wraps
<p>Writing</p> <p>1.3 Apply writing conventions</p> <p>2.3 Write in a variety of forms</p>	<p>*GLE not available at this time</p>	<ul style="list-style-type: none"> • Homework: Take 'n' Teach • Supplemental Activity: Student Assessment
<p>Reading</p> <p>1.3 Build vocabulary through wide reading</p> <p>3.2 Read to perform a task</p>	<p>1.3.2 Understand and apply content/academic vocabulary critical to the meaning of the text</p> <p>3.2.2 Apply understanding of a variety of functional documents</p>	<ul style="list-style-type: none"> • Read all overheads with teacher • Cooking: Bean Wraps • Homework: Take 'n' Teach • Supplemental Activity: Student Assessment

You're the Chef: Bean Wraps

Preparation Outline

Activity Supplies

Unit Trivia Review

- Trivia cards from Lessons 1, 2, and 3

Kitchen Safety

- Healthy Person Contract
- Note cards
- Tape
- Marker

Cooking Activity

- 6 plastic cooking trays (1 per learning team)
- 6 kid knives (1 per learning team)
- 6 sets of measuring cups (1 set per learning team)
- 6 sets of measuring spoons (1 set per learning team)
- 1 pair scissors (for the educator – students will use their own)
- 6 mixing bowls (1 per learning team)
- 6 mixing spoons (1 per learning team)
- 6 cutting boards (1 per learning team)
- 1 salad spinner
- 1 plastic container for leftover beans
- Small paper plates (1 per student)
- Plastic forks (1 per student)
- 6 sets of recipe cooking cards (1 per learning team)
- Dish soap
- Wash cloths and hand towels for clean up

Ingredients (per learning team)

- 1 carrot
- 1 piece of cabbage ($\frac{1}{2}$ of a medium cabbage head divided into 6 equal pieces – 1 per learning team)
- $\frac{1}{2}$ cup cooked black beans
- 1 portion of a head of lettuce ($\frac{1}{2}$ of a medium lettuce head or another leafy green divided into 6 equal portions – 1 per learning team)
- 1 whole wheat tortilla
- Seasonings (cumin, salt, pepper) – keep these with you and when the students are ready for them have them measure out what they need while you oversee them.

Review

- Classroom Tasting Challenge checklist

Overheads

- Kitchen Behaviors
- Bean Wraps Recipe for the class
- Take 'n' Teach

Student Handouts	<ul style="list-style-type: none"> • Bean Wraps recipe for the family • Take 'n' Teach
Teacher Handouts	Student Assessment and Answer Key
Changes for K and ELL Classes	Demonstrate each cooking activity in steps in front of class.
Rainy Day Activity Supplies	None

You're the Chef: Bean Wraps

Outline

Content

Introduction and Lesson Overview (4 Min)

- Review hand washing

Today we will use all of the information we learned in past lessons, and prepare a snack that gives us complete, plant-based protein using ingredients that you can grow in the garden at school or at home.

- The classroom teacher gets students into teams. Then the CHANGE educator will review the importance of hand washing and sanitization.
- Review proper hand washing technique, and where germs on the hands tend to be (knuckles, finger nails, back of hands).

Trivia Review and Hand Washing (10 Min)

- Students wash hands while CHANGE educator prepares cooking trays, and teacher leads Trivia Game

- Explain the rules, object and reward of the Trivia Game.
- The Trivia Game uses trivia cards to review information presented in the lesson. On the top left side of the card is the category i.e. Food Groups, Soil, Protein. In the middle of the card is a trivia question. At the bottom of the card is the answer. This deck of trivia cards will be used again and again to help us review concepts that we have learned in past lessons. (See Lesson Materials section for Lessons 1-3 trivia cards)
- Begin preparing food trays while students are washing hands or playing the Trivia Game with the classroom teacher
- Send groups to the sink while classroom teacher reviews the unit with trivia cards from all three lessons
- Stop playing trivia as soon as all hands are washed (If there is no winner yet, then continue the game after cooking).



Directions

- Teacher reads the trivia question and the class will have 10 or 15 seconds to discuss and answer the question.
- Teacher pulls a group name from a container; the chosen group will offer their answer. If they get the answer correct they get a point for their team; if they answer incorrectly or not at all the instructor then picks another team stick and asks the same question.
- Continue until all teams have had a chance. Set a goal for the day (i.e. First team to reach 4 correct answers gets to take the snack to the principal).

Kitchen Safety (10 Min)

- **Healthy Person Contract: Kitchen Behaviors**



- **Clean and Careful**

- **Distribute Cooking Trays**

- **Explain Tools and Rules**

- Post Healthy Person Contract, and have students brainstorm safe cooking behaviors. Have teacher write ideas on note-cards as they are suggested, then tape them to the HPC.
- Any professional chef will tell you that the two most important things to remember in the kitchen are to be clean and to be careful.
- Being clean means that we **always** wash hands before we handle food.
- We also wash **all** fresh food that we are going to use.
- Being careful means understanding the tools we are working with and following directions about proper use of the tools.
- Following directions will keep you from hurting yourself or anyone else.
- Distribute cooking trays to teams. Once each cooking team has received a tray, show all cooking materials and explain their use.

Cooking Trays

- Whenever we have cooking days, we use these trays to bring you all of the things that your group needs to make your part of the snack today. Do not touch anything on the tray until everyone in your group has clean hands and your teacher tells you to start. When you are done using something from the tray, put it back on the tray, **not** on your desk.

Knives

- The most important thing about cooking is knowing how to use your knife safely (**demonstrate proper cutting and how to pass a knife to someone else safely**). *These knives are small but they are very sharp.*
- The most important kitchen rule is:
NEVER POINT YOUR KNIFE AT YOURSELF OR ANYONE ELSE.
*If you do not follow this rule then you **cannot** work with knives in class anymore.* This is very important. We get special permission to bring these knives into class for cooking and if anyone is hurt because they did not follow directions we may not be able to use them anymore.

Other Cooking Tools

- You will learn more about many different cooking tools during cooking lessons. On your trays you have measuring cups and spoons (**show tools**) to measure

ingredients accurately. You have a clean cutting surface (**show**) this surface is what you should use to cut all food on. You have bowls (**show**) to mix food in and spoons (**show**) to stir ingredients.

- **Review Safe Cooking Behaviors**

Kitchen Behavior Recap

Ask students a few questions to review (i.e. What is one thing you should never do when you have a knife in your hand? (**point knife at yourself or someone else**) What is the first thing you need to do before you start handling food? (**wash hands**)

Cooking: Bean and Greens Tortilla Wraps (25 Min)

Educator reads overhead of recipe, explains the nutrients and leads recipe chant with class.

- **Describe nutrients of the foods in this recipe**

- Explain the **nutrients**:

- Protein helps our muscles.
- Vitamin A helps our eyes.
- Vitamin C helps heal our cuts.
- Fiber helps clean out our insides.

We will learn more about these nutrients in later lessons. Let's do a practice in "*repeat after me*": Point to an ingredient on the recipe, say the ingredient, the vitamin it's high in, and point to the body part it helps.

Chant the following, with actions:

- **Recipe Chant**

- "Beans" (repeat) "Protein" (repeat) bend arm at elbow and flex arm muscle.
- "Greens" (repeat) "Vitamin A" (repeat) point at eyes.
- "Greens" (repeat) "Vitamin C" (repeat) point to cut on skin.
- "Beans and Greens" (repeat) "Fiber" (repeat) rub belly.

- **Cooking Directions**

Hand out 1 cooking card to each team member. They are labeled: **Harvest, Beans & Spice, Cut, Tear**

Harvest

- Harvests and washes bean leaves from in-class experiments **OR** goes outside to harvest greens from the garden, then washes and "salad spins" them. Harvesters should **WASH THEIR HANDS** before harvesting.

Beans & spice

- **Carefully** measures ingredients and gently stirs beans with spices

Cut

- Cuts up cabbage and carrots

- **Making Bean and Greens Tortilla Wraps**

- **Classroom Tasting Challenge**

Tear & Toss

- Tears lettuce and any greens harvested from outside; once all ingredients are added to the bowl, tosses gently

All Teams

- All ingredients are added to one bowl once they are prepared.
- If you have teams with more than 4 students, double up on **Harvest** or **Tear**.
- Students are in charge of the specified activity on their card
- Once student activities are complete, or mostly complete, the whole class is to stop what they are doing and listen to the next step in cooking: making Bean and Greens Tortilla Wraps

Making Bean and Greens Tortilla Wraps

- **Every student gets ¼ of a tortilla**
- **Each student gets a scoop of the bean filling**
- **Roll and munch**
- This is a complete protein snack with beans and grains.
- While kids are eating mention that recipes turn out differently depending on what ingredients you use and who is making it.
- **Classroom Tasting Challenge:** After tasting the Bean and Greens Tortilla Wraps, ask students to raise their hands to show you how many students tasted, liked or did not like the recipe. Record the number of students who raise their hands in the appropriate column on your Classroom Tasting Challenge checklist, out of the total number of students in class that day.
- Pass out a copy of the Bean Wrap family recipe to each student, and encourage them to make the recipe at home with their families.

**Clean-up and Trivia Review
(5-10 Min)**



- **Teacher resumes Trivia game while CHANGE educator cleans up**

- Classroom teacher resumes the trivia game while CHANGE educator begins clean-up.
- Classroom teacher randomly selects a group name for each trivia question. Make sure each team gets a chance to answer a question.
- **Winners take a Bean Wrap to the principal.**
- CHANGE educator and teacher choose a few students to help clean up; educator **makes sure an “extra” bean wrap is ready for the principal** while class revisits the trivia game. A winner may not be decided before you leave so cover the snack and leave it for delivery later.

Homework: Take ‘n’ Teach

Take ‘n’ Teach: Explain to students that they have homework to write a lesson plan based on one of the topics covered in previous lessons. Once they write this lesson, they will teach it to someone that they live with and bring it back to school with an adult signature.

Review and Reflection

- **Take ‘n’ Teach**
- **Classroom Tasting Challenge**

Ask several students to give feedback about the Take ‘n’ Teach homework assignment

- Did you teach your family members something new to them?
- How did it feel to teach your family about nutrition?
- **Classroom Tasting Challenge:** One week after making the Bean and Greens Tortilla Wraps in class, ask students to raise their hands to show you how many students made the recipe at home. Record the number of students who raise their hands in the appropriate column on your Classroom Tasting Challenge checklist, out of the total number of students in class that day. If possible, write the number of adults who made the recipe with your students on the checklist next to the row for that recipe.

Lesson Materials

You're the Chef: Bean Wraps

- **Bean Wraps Recipe**
- **Bean Wraps Recipe for Family and Food Label**
- **Take 'n' Teach**
- **Recipe Cards**
- **Trivia Cards**

Supplementary Activities

- **Student Assessment**
- **Assessment Answer Key**

You're the Chef: Bean Wraps

Name: _____ Date: _____

Directions: Use the words in the box to complete the sentences below.

Germination	one	amino acids
nutrients	Magnesium	three and a half

1. Our bodies make 11 _____ and we must get the remaining 9 from the foods that we eat to make protein in our bodies.
2. _____ is a mineral found in soil that is important for plant and human health.
3. Protein and Vitamin C are two examples of _____. Our bodies need to get these from the food that we eat every day in order for our bodies to function properly.
4. _____ is the time when a sprout and a root begin to emerge from your seed.
5. In order to have a healthy diet and a strong body, it is important to eat at least _____ Cups of fruits and vegetables and get at least _____ hour(s) of physical activity each day.

TURN OVER

Directions: **Either:** Select 4 words or phrases and use each in a sentence that correctly demonstrates its meaning **OR:** Write definitions for 6 of the words or phrases.

Minerals	Protein	Furrow	
Serving Size	Cells	Absorb	Vegan
Nutrient	Soil	Food Groups	

1. _____

2. _____

3. _____

4. _____

5. _____

6. _____

You're the Chef: Bean Wraps

Directions: Use the words in the box to complete the sentences below.

Germination	one	amino acids
nutrients	Magnesium	three and a half

6. Our bodies make 11 amino acids and we must get the remaining 9 from the foods that we eat to make protein in our bodies.
7. Magnesium is a mineral found in soil that is important for plant and human health.
8. Protein and Vitamin C are two examples of nutrients. Our bodies need to get these from the food that we eat every day in order for our bodies to function properly.
9. Germination is the time when a sprout and a root begin to emerge from your seed.
10. In order to have a healthy diet and a strong body, it is important to eat at least 3 ½ Cups of fruits and vegetables and get at least 1 hour(s) of physical activity each day.

TURN OVER

Directions: **Either:** Select 4 words or phrases and use each in a sentence that correctly demonstrates its meaning **OR:** Write definitions for 6 of the words or phrases.

Minerals	Protein	Furrow	
Serving Size	Cells	Absorb	Vegan
Nutrient	Soil	Food Groups	

Nutrient- food components needed by people, animals, and plants to stay healthy and strong. Proteins, carbohydrates, fats, water, minerals, and vitamins are all nutrients.

Protein - a nutrient found in food that is made up of amino acids. Protein is one of the building blocks of a cell.

Food Groups – there are 5 food groups in MyPyramid, these are the categories into which most of our foods fit. They include: grains, milk, fruits, vegetables and meat & beans. There is also a category called “Oils” that is not a food group, but a component of foods such as fish, avocados and olive oil that we all need to eat to stay healthy.

Cell - one of the tiny units that carry on the basic functions of life.

Vegan – someone who eats only plants and plant products (no meat, fish, eggs or dairy).

Furrow– a shallow little row in the soil for planting seeds.

Germination – the time when a sprout and a root begin to emerge from your seed.
















Soil- the home for plants. It is where plants grow and receive all of their nutrients.

Minerals- a substance found in nature that plants and people need to stay healthy.

Absorb- to soak up something. Like a sponge absorbs water.

Bean and Greens Tortilla Wraps for the Classroom

Serves 1 learning team of 4-6 students

	Ingredient	Directions	Nutrient
Measure	<p>Cooked Black Beans</p> 	<p>Measure ½ cup of beans and add to the bowl.</p> 	<p>Protein Fiber</p>  
Measure	<p>Cumin Powder, Salt, and Black Pepper</p> 	<p>Measure ¼ teaspoon of cumin, 1 pinch of salt, and 1 pinch of black pepper and add to the bowl.</p> 	Spices and Salt
Tear	<p>Mixed Greens (Lettuce, Chard, Lettuce Leaves, Kale, Spinach)</p> 	<p>Tear 2 handfuls of mixed greens into small pieces and add to the bowl.</p>	<p>Vitamin A Vitamin C</p>  
Grate	<p>Carrot</p> 	<p>Grate 1 whole carrot and add to the bowl.</p> 	Vitamin A
Chop	<p>Cabbage</p> 	<p>Chop ½ cup of cabbage into small pieces and add to the bowl. Mix together all the ingredients.</p> 	Vitamin C
Cut	<p>Whole Wheat Flour Tortilla</p> 	<p>Cut tortilla into 4 pieces and wrap a spoonful of bean and vegetable mixture in the tortilla</p> 	Fiber



Bean and Greens Tortilla Wraps



Nutrition Facts	
Serving size: 1 Wrap (109g)	
Servings Per Recipe 4	
Amount Per Serving	
Calories 118	Cal. from Fat 6
% Daily Value*	
Total Fat 1g	0%
Saturated Fat 0g	0%
Cholesterol 0mg	0%
Sodium 285mg	10%
Total Carbohydrate 29g	10%
Dietary Fiber 5g	20%
Sugars 2g	
Protein 5g	
Vitamin A 75%	Vitamin C 10%
Calcium 4%	Iron 8%
* Percent Daily Values is based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs.	

Take 'n' Teach!

You have learned a lot in the last few weeks in CHANGE classes. Now we want you to take the information you have and teach it to someone else. Prepare your own lesson plan to present to a family member or friend. Follow the steps below.

1. Pick your favorite CHANGE topic (from the list below)

Food Groups

Protein

Hand Washing Methods

Planting Seeds

Making Healthy Snacks

Healthy Soil

2. Find at least one picture that shows what your topic is (you may draw your own if you cannot find one)
3. Refer to your notes to help you remember what you have learned. You may also use other resources like books or the Internet.
3. Fill in all of the blanks on **Lesson Plan 1** on the back of this page and you are ready to teach!

Lesson Plan 1

1. **TOPIC:** _____
2. **Your Name:** _____
3. **I have decided to teach you something very important today. I want to talk about (topic) _____.**
4. **SHOW PICTURE**
5. **I really liked learning about this topic in my CHANGE class because:** _____

6. **Knowing more about (topic) _____ will help you because:**

7. **Thank you very much for listening to my presentation.**
8. **What did you learn about (topic) _____ from my lesson?**

Signature (of family member or friend you just taught)

Harvest

Lesson 4

Cutter

Lesson 4

Tear & Toss

Lesson 4

Beans & Spice

Lesson 4

1. Be very careful and follow the knife safety rules.

2. Chop about ½ cup of red cabbage and add to the mixing bowl.

3. Chop up two carrot sticks and add to the mixing bowl.

Lesson 4

1. If you have a garden with food growing in it, go out and collect what ever is fresh and ready to eat!

2. If you have grown beans in your classroom you will harvest the top leaves of the plant, they will be the most tender and tasty!

3. Any food you harvest must be washed and dried before it is added to the recipe.

Lesson 4

1. Measure ½ cup of beans and add to a medium sized bowl.

2. Measure ¼ tsp cumin and add to the bowl

3. Add one pinch of salt and one pinch of black pepper to the bowl and gently stir.

Lesson 4

1. Tear any greens that will go into our salad into small pieces and add them to the bowl. This includes things like lettuce, rainbow chard and the bean leaves that you may have growing in your class.

2. Gently “toss” all ingredients together.

Lesson 4

Trivia Cards

Food Groups

Q: Name a food that is in the fruit group.

Food Groups

Q: Name a food that is in the milk group.

Food Groups

Q: Name a food that is in the grain group.

Food Groups

Q: Name a food that is in the vegetable group.

Food Groups

Q: Name a food that is in the meat and beans group.

Food Groups

Q: Name a food that is in the Oils category.

Protein

Q: Seeds and beans have a lot of this muscle building nutrient.

(Protein)

Protein

Q: Name one body part that benefits from protein in your diet.

(Muscles, all cells and organs)

Protein

Q: Name two animal based foods that are high in protein.

(Fish, eggs, beef, etc.)

Protein

Q: Name two plant-based foods that are high in protein.

(Beans, seeds, nuts)

Protein

Q: How big is a serving of animal protein?

(The size of the palm of your hand)

Garden

Q: Name two important things a seed needs to grow.

(Water, light, soil and air)

Garden

Q: What is the belly button rule?

(No tools above the belly button)

Soil

Q: Name two living ingredients found in soil.

(worms, beetles, nematodes, bacteria, fungi, etc.)

Soil

Q: Name one mineral found in soil that is important for plant and human health.

(Calcium, Magnesium, Iron)

Soil

Q: What is the source of all our food?

(Soil)

Soil

Q: What do we call the top layer of earth where plants grow their roots?

(Soil)