COOKING DEMONSTRATION: BLACK BEAN AND VEGGIE TOSTADA OLÉ

INTRODUCTION

Nutrients play an important role in the lives of all living organisms. Nutrients that we obtain from food provide our bodies with the means and materials to grow, stay healthy, and give us **energy** to think, learn, and play. In order to maintain healthy bodies, it is important to understand the roles different nutrients play in our bodies and what foods can provide them.

There are six classes of nutrients: carbohydrates, protein, fat, water, minerals, and vitamins. These six types of nutrients serve different functions in our bodies. The main function of carbohydrates is to provide our bodies with energy. Carbohydrates are classified into two categories: simple and complex. Simple carbohydrates are found in foods like fruit, milk, and vegetables. These carbohydrates provide energy slightly faster than complex carbohydrates. Complex carbohydrates are present in foods like starchy vegetables, beans, and whole wheat products. Fiber, which is found in foods like fruit, vegetables, and beans, is a special type of carbohydrate that is not typically digested in humans, but is important for our digestive system to function properly. Proteins, which are found in beans and meat products, provide our bodies with another source of energy, help build and repair our muscles, and are important parts of cell structure and function. Fats from foods like avocados, nuts, and meat products are stored in the body and also provide a source of energy. Fats are also an important part of the structure of cells in our bodies. There are two types of fats: oils are fats that are liquid at room temperature, and solid fats are solid at room temperature. Water is a nutrient that helps transport materials through our body and helps regulate body temperature. Minerals, like calcium and iron, are important for growth, development, and maintenance of the tissues and cells in our bodies. Vitamins, like vitamin A and vitamin C, are important for growth, development, and maintenance of the tissues and cells in our bodies.

Some of the nutrients are considered **essential**. This means that our bodies cannot make enough of it (or cannot make it at all), so we must obtain them from food. Regardless of the specialized functions of nutrients, all are needed in certain amounts for maintaining health.

MyPlate is a nutrition guide developed by the United States Department of Agriculture (USDA). It illustrates the five food groups that are the building blocks for a healthy diet using a familiar image – a place setting for a meal. The five food groups included in MyPlate are: fruits, vegetables, grains, protein, and dairy. MyPlate includes recommendations relative to the amounts of each food that should be consumed within each group depending on age, gender, and amount of physical activity. One of the recommendations illustrated by MyPlate is to make half of a person's plate fruits and vegetables.

Flavors and textures of a bean and vegetable tostada combine to create a delicious, personal, finger-food snack youth will be excited to taste. The crispy tostada may remind youth of a taco, allowing them to taste a combination of vegetables and protein atop the crunchy shell. Preparation of the tostada recipe provides opportunity to revisit nutrients the youth learned about in *Discovering Healthy Choices*. The vegetables contain carbohydrates, fiber, water, minerals, and vitamins. Fiber, protein, carbohydrates, and minerals are found in the black beans. There are carbohydrates in the tostada shell and fats in the oil used to cook the vegetables and other ingredients. In this cooking demonstration youth will explore more of the foods they learned about that are grown around the world in the *Discovering Health Choices* Module 1. Youth will also be introduced to food safety recommendations.

CONCEPTS AND VOCABULARY

- **B-vitamins**: a group of many vitamins that help break down fat, protein and carbohydrates for energy. They are also important for the growth, maintenance and repair of the cells in our bodies.
- Baked foods: foods that are cooked in an oven, using dry heat.
- **Blend:** to mix different ingredients together.
- Calcium: a mineral that helps us build strong bones and teeth.
- **Carbohydrates**: a nutrient that provides the first source of energy that our bodies use; they provide energy to the body when needed immediately.
- Cultivate: to prepare and use land for growing crops.
- Culture: the beliefs and practices of social groups.
- Cultural foods: food that is prepared by a specific cultural group.
- **Energy:** something needed to fuel all processes in the body, from regulating our body temperature to being physically active.
- Essential nutrients: nutrients that our bodies cannot make enough of, or do not make it at all and so we must obtain them from food.
- Fat: a nutrient is used as a source of energy; it is also important for protecting the cells in our bodies.
- **Fiber**: a nutrient that helps our digestive system to function properly.
- Food processor: an electric tool that mixes, chops, and purees foods.
- Fried foods: foods that are cooked in hot oil.
- Iron: a mineral that is an important part of the blood because it carries oxygen to all of the tissues.
- Minerals: elements that are needed for growth, development and maintenance of the body's tissues, like iron and calcium.
- MyPlate: a nutrition guide developed by the United States Department of Agriculture (USDA). It illustrates the five food groups that are the building blocks for a healthy diet.
- Native: something that is original to a specific place or region.
- Nutrients: substances our bodies need to grow and stay healthy.
- Observation: the act or instance of noticing, perceiving, or attentively watching an occurrence.
- Oils: fats that are liquid at room temperature.
- Protein: a nutrient that is used for energy; it helps to build and repair tissues and organs like
 muscles and the heart.

CONCEPTS AND VOCABULARY (CONTINUED)

- **Refined grain:** these grains only have the middle layer, the endosperm, so these grains do not have the fiber and nutrients the other two parts a grain has to offer.
- Solid fats: fats that are solid at room temperature.
- **Vitamin A**: a vitamin that is important for our night vision.
- Vitamin C: a vitamin that is important to keep our gums healthy and help our wounds heal.
- Vitamin D: a vitamin that is needed to help our bodies use calcium.
- Vitamins: molecules needed for growth, development, and maintenance of the body's tissues, like Vitamin A and Vitamin C.
- Whole grain: includes all parts of the grain: the outer layer, called the bran, which has fiber; the
 inner layer, called the endosperm; and the most inner part, called the germ, which contains a lot of
 nutrients including B-vitamins.

CALIFORNIA NUTRITION EDUCATION COMPETENCIES SUPPORTED

Cooking Up Healthy Choices supports California Nutrition Education Competencies. Please see page 6 for more information about which competencies are supported.

TIME REQUIRED

45 to 60 minutes

DISCOVERING HEALTHY CHOICES MODULES REINFORCED

Modules 3, 5

COUNTRY CONNECTION

Mexico

The climate in most of Mexico is warm year-round, however there are some places in central Mexico where it snows. A small part of the country is used for farming. The native people of Mexico cultivated a variety of vegetables, but the major staple of their diet was corn, chilies, beans, and squash. Corn grown in Mexico is primarily used for making tortillas. Many crops grown in Mexico are also grown in California, including: tomatoes, corn, avocados, chiles, onion, lettuce, garlic, and squash. Mexican cooking is known for using many herbs and spices like chilies, chipotle, oregano, cilantro, and epazote.

VEGETABLE AND GARDEN CONNECTION

Highlights fall/winter crops that can be grown in the instructional garden.

Vegetable	Discovering Healthy Choices Connections
Black Beans	Warm season crop; grown in Australia, Chile, and the United States
	(Module 1)
	• A good source of protein, B-vitamins, fiber, and iron (Module 3)
	MyPlate Vegetable Subgroup: Beans & Peas (Module 5)
	• Nutrient information provided to calculate and create a Nutrition Facts Label for black beans (Module 6)
	Optional ingredient for finger salad recipe (Module 8)
Cilantro	• Cool to warm season crop; grown in Chile, India, Mexico, and the United States; herb (Module 1)
	Optional ingredient for finger salad recipe (Module 8)
Corn	•Warm season crop; grown in Australia, Chile, Mexico, and the United States (Module 1)
	• A good source of B-vitamins and vitamin C (Module 3)
	MyPlate Vegetable Subgroup: Starchy (Module 5)
	• Nutrient information provided to calculate and create a Nutrition Facts Label for corn (Module 6)
	Optional ingredient for finger salad recipe (Module 8)
Garlic	Warm season crop; grown in China and the United States (Module 1)
	• A good source of carbohydrates, protein, B-vitamins, vitamin C, and calcium (Module 3)
	MyPlate Vegetable Subgroup: Other (Module 5)
	• Nutrient information provided to calculate and create a Nutrition Facts Label for garlic (Module 6)
Onion	• Warm season crop; grown in Australia, France, Iraq, Kenya, Mexico, and the United States (Module 1)
	A good source of vitamin C (Module 3)
	MyPlate Vegetable Subgroup: Other (Module 5)
	• Nutrient information provided to calculate and create a Nutrition Facts Label for onion (Module 6)
Summer Squash	•Warm season crop; grown in Chile, Mexico, and the United States (Module 1)
	A good source of vitamin C (Module 3)
	MyPlate Vegetable Subgroup: Other (Module 5)
	• Nutrient information provided to calculate and create a Nutrition Facts Label for summer squash (Module 6)
Tomato	• Warm season crop; grown in Australia, Chile, France, Iraq, Kenya, Mexico, and the United States (Module 1)
	• A good source of vitamin A and vitamin C (Module 3)
	MyPlate Vegetable Subgroup: Red & Orange (Module 5)
	• Nutrient information provided to calculate and create a Nutrition Facts Label for tomato (Module 6)
	Optional ingredient for finger salad recipe (Module 8)

GETTING READY

- 1. Make copies of the *Black Bean & Veggie Tostada Olé* handout (Appendix 2B); one for each youth.
- 2. Make a copy of the *MyPlate* reference sheet (Appendix 2C); one for the facilitator's use.
- 3. Prepare vegetables by washing them.
 - **Facilitator Tip**: If time is limited, chop some of the vegetables prior to beginning the demonstration.
- 4. Provide each youth with a copy of the *Black Bean & Veggie Tostada Olé* handout. Explain that the youth are to keep the handout upside down until asked to turn it over. Explain that the youth will answer the opening question on the blank side of the handout.

Facilitator Tip: Encourage youth to ask questions and share personal experiences and interactions with the ingredients throughout the demonstration.

OPENING QUESTIONS/PROMPTS

Ask the youth to respond to each question/prompt below by recording them on the blank back side of the *Black Bean & Veggie Tostada Olé* handout individually, and then sharing their ideas verbally.

- Explain what you know about fruits and vegetables grown in Mexico.
- Explain where else in the world produce native to Mexico can grow.
- Explain what you know about nutrients.

PROCEDURE (EXPERIENCING)

- Begin the demonstration by washing your hands in front of youth. Explain the importance safe food handling practices by washing hands, washing fruits and vegetables, and properly handling and storing the produce and other ingredients.
- 2. Show each of the ingredients individually and ask youth to share the name of the vegetable, and what they know about it. Confirm the names of the ingredients to the youth.
- 3. Ask the youth to flip over their handouts. Ask a youth to read the name of the recipe.
- 4. Explain that the youth need to answer the questions on the handout throughout the cooking demonstration. Discuss what an observation is with the youth.

Ingredients

(Recipe makes enough for 30 youth to taste) Tostada:

- 1 tablespoon canola oil, separated
- 1 medium yellow onion, medium chopped
- 2 red bell peppers, seeds removed, medium chopped
- 2 cups kernel corn, canned, frozen, or fresh
- 2 zucchini, medium chopped
- 2 yellow squash, medium chopped
- 1 tablespoon of garlic, finely chopped
- 28-ounce can vegetarian refried black beans or pinto beans
- Salt and pepper
- Baked corn tostadas, 1 per youth
- 6 ounces Queso fresco

Salsa:

- 2 cloves of garlic, roughly chopped
- 4 medium tomatoes, roughly chopped
- 1 medium yellow onion, medium chopped
- 1 bunch cilantro or epazote (an herb from Mexico), roughly chopped

Facilitator Tip: If any of the ingredients are being grown in the garden and are ready to be harvested, they can be used for this recipe. If possible have youth help with harvesting the vegetables. Be sure to wash the vegetables before use.

Facilitator Tip: Keep refrigerated foods cold at 40°F or below to ensure food safety.

Materials

- *Materials provided in curriculum
- *Black Bean & Veggie Tostada Olé master recipe (Appendix 2A)
- *Black Bean & Veggie Tostada Olé youth handout (Appendix 2B)
- *MyPlate reference sheet (Appendix 2C)
- Portable butane or propane burner
- Extra cans of butane or propane gas
- Skillet
- Cutting board
- Chef's knife
- Can opener
- Food processor or blender
- Measuring cups
- Measuring spoons
- Rag
- Trash bags
- Small plates
- Disposable forks
- Napkins



Facilitator Tip: If the youth are having difficulty describing their observations using their five senses, use the following prompts. When we make observations, we are using our five senses to understand the world around us. Observations are made using sight, smell, taste, touch, and sound. Observations using sight include color, size, and texture. Observations using smell include good or bad smells or comparing it to other familiar smells. Observations using taste may include the flavor and texture. Observations of touch are texture, weight, temperature, and softness. Observations using sound can include things you hear during the demonstration.

- 5. Ask the youth to answer the first question on the handout. Ask them to use what they know about nutrients found in different foods to record their thoughts about which nutrients they would expect to be in the foods in this recipe.
- 6. Begin preparing the recipe, according to the Master Recipe (Appendix 2A).
- 7. Throughout the cooking demonstration describe what you are doing and use the following prompts to generate discussion:
 - Encourage the youth to ask questions and share previous experiences and interactions with the ingredients throughout the demonstration.
 - Ask the youth to explain what they know about where these ingredients come from and how they are grown.
 - Ask the youth to explain what they know about which of these ingredients are grown in California.
 - Tell the youth about using different utensils and cookware.
 - Have the youth explain what they know about how to safely handle knives when cooking.
 Emphasize the importance of keeping knife tip pointed down at the cutting surface, keeping fingers away from area being cut.
 - Have the youth explain what they know about different ways to cut vegetables. Tell the youth about the various cooking techniques being used.
 - Which of these ingredients have you tasted before?
 - (If growing an instructional garden) Which of these ingredients are growing in your garden?
 - Ask the youth to describe what they think a "whole grain" is. Ask them to describe what they think is the difference between a whole grain and a refined grain.
 - Ask the youth to explain what they know about MyPlate.

Facilitator Tip: Use the MyPlate reference sheet (Appendix 2C) to assist in describing MyPlate recommended servings for each of the food groups.

- 8. Before serving, ask youth to wash their hands before receiving a sample of the salad.
- 9. Serve a sample of the prepared food on individual plates for each youth. If the youth are unfamiliar with tostadas, they may need some instruction on how to eat it. Explain that the youth can eat the tostada like a slice of pizza.
- 10. Ask youth to wash hands before receiving a sample of the tostada.
- 11. Explain that the youth need to answer the second question using their five senses to describe their "Black Bean & Veggie Tostada Olé Experience."

SHARING, PROCESSING AND GENERALIZING

- 1. Have youth share what they observed during the cooking demonstration (question 1 on the *Black Bean & Veggie Tostada Olé* handout).
- 2. Have youth share what nutrients they think might be in this recipe (question 2 on the *Black Bean & Veggie Tostada Olé* handout).

Facilitator Tip: The youth may need prompting about which nutrients might be in the foods in this recipe.

- What do you know about foods that provide protein?
- What do you know about foods that provide us with vitamin C?
- What do you know about the types of foods that have a lot of fiber?
- 3. Have youth share their "Black Bean & Veggie Tostada Olé Experience" using their five senses (question 3 on the *Black Bean & Veggie Tostada Olé* handout).
- 4. Ask youth to share if they tasted any new foods today. And if so, what they thought about those new foods.
- 5. Ask youth to share their overall opinions of the Black Bean & Veggie Tostada Olé.

Facilitator Tip: This can be done by asking youth to show two thumbs up if they like it or two thumbs down if they did not; you can ask them to record it on their handouts, or have them vote and record on the board the number of youth who liked it and those who did not.

- 6. Ask youth to discuss how they might change this recipe to include other healthy ingredients. Some examples may include:
 - Other vegetables: lettuce, eggplant, spinach, mushrooms
 - Other proteins: chicken, tofu, beef, fish
 - Other grains: serve it over whole grain brown rice or with a whole wheat flour tortilla
 - Create your own healthy salsa; include fruits like mangos and pomegranate seeds

CONCEPT AND TERM DISCOVERY/INTRODUCTION

Make sure that key concepts and vocabulary terms are either discovered by the students or introduced to them: baked foods, fried foods, whole grains, refined grains, the various nutrients found in each the foods (for example, beans have fiber and protein, corn and tortillas have carbohydrates, squash has vitamin C, and bell pepper has vitamin C).

APPENDIX 2A. BLACK BEAN AND VEGGIE TOSTADA OLÈ

Cooking Demonstration 2 Master Recipe

*Recipe makes enough for 30 tastings

INGREDIENTS

Tostada:

- 1 tablespoon canola oil, separated
- 1 medium yellow onion, medium chopped
- 2 red bell peppers, seeds removed, medium chopped
- 2 cups kernel corn, canned, frozen, or fresh
- 2 zucchini, medium chopped
- 2 yellow squash, medium chopped
- 1 tablespoon garlic, finely chopped
- 30 ounce can vegetarian refried black beans or pinto beans
- Salt and pepper
- Baked corn tostadas, 1 per person
- 6 ounces queso fresco (optional)

Salsa:

- 2 cloves of garlic, roughly chopped
- 4 medium tomatoes, roughly chopped
- 1 medium yellow onion, medium chopped
- 1 bunch of epazote (an herb that can be found in Mexican Markets) or cilantro, roughly chopped

INSTRUCTIONS

- Heat 2 teaspoons canola oil in medium skillet over medium heat. Add onion, bell peppers, corn, zucchini, and yellow squash. Cook, stirring occasionally, until vegetables are softened, about 6 minutes.
- 2. Heat 1 teaspoon canola oil in medium skillet and then add garlic and cook for 30 seconds. Add can of refried beans. Mix beans and garlic together until garlic is well incorporated and heat until the mixture is hot. Set aside.
- 3. For the salsa: place ingredients in food processor or blender and blend until smooth.
- 4. Spread a thin layer of the bean and garlic mixture on top of a tostada. Add a spoonful of the cooked vegetables. Top with salsa and queso fresco (if using).



Youth Handout

Black Bean & Veggie Tostada Ole

1 tablespoon canola oil, separated
1/4 cup yellow onion, medium chopped
1 cup red bell peppers, medium chopped
1 cup kernel corn, canned, frozen, or fresh
1 cup zucchini, medium chopped
1 cup yellow squash, medium chopped
1 clove garlic, finely chopped
15 ounce can refried beans

Queso fresco or feta cheese (optional)
Corn tostadas (1 for each person)*

*Corn tostadas can be purchased from the store or made at home. To prepare baked tostadas, preheat oven to 400 degrees. Place corn tortillas on a baking sheet and bake for 10-15 minutes, until golden brown and crisp.

- 1. Heat 2 teaspoons canola oil in medium skillet over medium heat. Add onion, bell peppers, corn, zucchini, and yellow squash. Cook, stirring occasionally, until vegetables are softened, out 6 minutes.
- 2. Heat 1 teaspoon canola oil in medium skillet and then add garlic and cook for 30 seconds. Add can of refried beans. Mix beans and garlic together until garlic is well incorporated and heat until the mixture is hot. Set aside.
- 3. For the salsa: place ingredients in food processor or blender and blend until smooth.
- 4. Spread a thin layer of the bean and garlic mixture on top of a tostada. Add a spoonful of the cooked vegetables. Top with salsa and gueso fresco (if using).
- 1. List nutrients you think are found in the foods in this recpe.
- 2. Observations throughout the cooking demonstration.
- 3. My Black Bean & Veggie Tostada Olè Experience Use your 5 senses to describe your food experience in words and pictures.

Salsa

2 cloves garlic, finely chopped

4 medium tomatoes, roughly chopped

1 medium yellow onion, medium chopped

1 bunch cilantro, roughly chopped

MyPlate Servings in Recipe

Vegetables: 1 – 1 ½ C

Bell pepper, corn, zucchini, yellow squash, tomato, onion

Grains: 1 oz equivalent

Corn tostada

Proteins: 1 – 2 oz equivalents

• Beans

Dairy: 1/2 - 1 C

Queso fresco

Oils: <1 tsp

