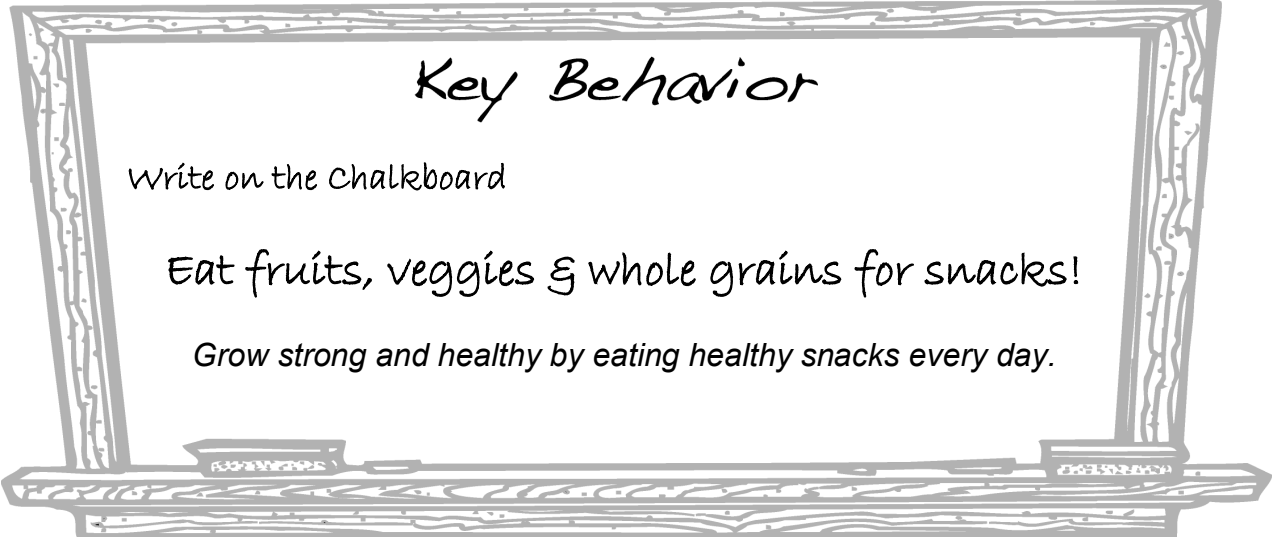


# Eating Healthy Snacks: Carlos & the Cornfield (5<sup>th</sup> Grade)



## NUTRITION OBJECTIVES CHECK LIST

- Students **prepare** and **taste** a vegetable snack.
- Students **express ways** they can **eat healthy snacks every day**.
- Students **explain** the **health benefits** of eating healthy snacks.
- Students **identify** that healthy snacks include whole grains, fruits & vegetables.

## MATERIALS AND INGREDIENTS

Bins	Teacher Provides	Will be Delivered
<p><b><u>In Kitchen Bin</u></b></p> <ul style="list-style-type: none"> <li>- cutting board (teacher only)</li> <li>- chef knife (teacher only)</li> </ul> <p><b><u>In Paper Goods Bin</u></b></p> <ul style="list-style-type: none"> <li>- plastic knives*</li> </ul>	<ul style="list-style-type: none"> <li>- napkins*</li> </ul>	<ul style="list-style-type: none"> <li>- book: "Carlos and the Cornfield" by Jan Romero Stevens</li> <li>- popcorn cakes (3-4)*</li> <li>- bag mini bell peppers (16 oz)</li> <li>- hummus (10 oz)</li> <li>- 2 cucumbers</li> <li>- serving containers</li> <li>- plastic coated paper plates*</li> <li>- family letters*</li> </ul>

\*per student

## EXPERIMENT MATERIALS

Bins	Teacher Provides	Will be Delivered
<p><b><u>In Kitchen Bin</u></b></p>	<ul style="list-style-type: none"> <li>- activity sheet copies*</li> </ul>	<ul style="list-style-type: none"> <li>- plastic baggies*</li> <li>- paper towels*</li> <li>- popcorn seed to sprout (3-4)*</li> </ul>

\*1 per student

## Reinforcing Colorado Comprehensive Health Standards

Fifth Grade, Standard 2. Physical and Personal Wellness. 1. Apply knowledge and skills to engage in lifelong healthy eating.

While INEP nutrition lessons focus on the Colorado Comprehensive Health Standards, you will find you may utilize lessons to reinforce mathematics, physical education, reading, writing & communicating, science & social studies standards for your class.

### SET-UP

#### Copies:

- Make copies of activity sheets (each student).

#### Food-prep:

- Students will make their own healthy snacks.
- Wash and cut cucumbers into pieces (1 per student).
- Divide (cut) mini peppers into enough pieces (1 per student).
- Have vegetables, hummus, popcorn crackers (3-4) per student, plastic coated paper plates, and plastic knives ready to pass out to students.

#### Experiment

- Have popcorn seeds, paper towels and zipper sandwich bags ready to pass out.
- Have permanent markers ready for students to write their name on their seed sprouting bag.
- Students will make predictions on their activity sheets then conduct the experiment. They may choose different ways to conduct the experiment. (*i.e., wet paper towel, dry paper towel, put bag in the sun, put bag in the dark.*)

#### Other-Prep:

- Have the book "Carlos and the Cornfield" ready to read to the class.
- Have video "How Do Seeds Grow?" ready to show to class.  
<https://www.youtube.com/watch?v=tkFPyue5X3Q>
- For more ideas on popcorn seed sprouting activity visit:  
<https://specialtreatfriday.org/2021/03/11/how-to-grow-seeds-in-the-classroom/>
- Optional: Have students use "Healthy Popcorn Cracker Snack" trivia questions for a fun classroom game.

### INTRODUCTION WITH STUDENTS

**Let's Wake Up Our Brains! Brain Boost Exercise!**

**Whole Grain is Great to Eat!**

- ♥ Whole grains are great to eat.
- ♥ Jump up high and touch the sky.
- ♥ Whole grains are great to eat.
- ♥ Crouch down low and touch your toe.
- ♥ Whole grains are great to eat.
- ♥ Jog fast and see how long you can last.



Now that our minds are ready to go, let's get started on our nutrition lesson

- **Refer to the Key Behavior and tell students that eating fruits, veggies and whole grains as snacks is one way to get the fiber, vitamins, and minerals our bodies need.**
- Show the book “Carlos and the Cornfield” to students. Ask them what they think this story is about. Then read the book to the class. Try to involve students actively in the story by asking some of the following questions:
  - Where did Carlos and his family live?
  - What was the deal Carlos made with his father?
  - How did he plant the corn?
  - Would you plant the corn the same way Carlos did?
  - What are some other ways Carlos could have handled his problem?
  - When do you think Carlos’s father noticed what Carlos did?

<b>PROCESS</b>
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- Step 1: Tell students that they are going to grow corn seeds as an experiment. Brainstorm with students what they think a seed needs to grow (water, sun, soil, light, air, warmth). Tell students that they are going to use a sandwich bag, paper towel and popcorn seeds as their materials.
- Step 2: Show class video “How Do Seeds Grow?”  
<https://www.youtube.com/watch?v=tkFPyue5X3Q>
- Step 3: Pass out the “Popcorn Sprouting” activity sheet. Have students complete the steps for their experiment:
1. Gather materials: baggie, paper towel, popcorn seeds.
  2. Put their name on their bag.
  3. How will they put their materials together?
    - a. For example: *I will wet the paper towel and wrap the seed in it and put it in a plastic bag. **Or** I will put the seed in the bag and cover the bag with the paper towel. **Or** I will wrap the seed in the dry paper towel.*
  4. Where will they put the bag?
    - a. For example: *I will put the bag in the window. **Or** I will put the bag in my desk. (sunny or dark place, warm or cold spot)*
  5. Have students write what they think will happen to the seeds.
- Step 4: Pass out experiment materials and have students follow the steps. Plan to revisit the activity sheets and corn seeds in a week or so to see what happened and have students write down observations.
- Step 5: Demonstrate how to make today’s healthy snack. Discuss each ingredient as you do. All the foods in the snack started out as a seed in a garden or on a farm.

(Optional): Turn the questions about the snack below into a fun trivia game. Students can answer individually or in groups. Give points and the winners can help pass out the ingredients and materials to make the snack.

- Popcorn crackers
  - What food group do these crackers fit in? (*grain group*)
  - These popcorn crackers are a whole grain.
  - What part of the plant are you eating when you eat popcorn? (*seeds*)
  - What are other ways to eat corn? (*on the cob, in a salad, salsa or chili, popcorn, tortilla, tamales, tortilla chips*)
  - Does corn fit in another food group? (*vegetable*)
  - How did Carlos eat corn? (*corn on the cob, tamales, tortilla, cornmeal pancakes*)
  
- Hummus
  - What is hummus made of? (*garbanzo beans*)
  - What food group does hummus fit in? (*both protein and vegetable*)
  - What part of the plant are you eating when you eat hummus? (*seeds*)
  - *Why does the hummus look like it does? (the beans are all mashed together, similar to refried beans)*
  - Have you ever tried hummus before?
  
- Bell peppers (vegetable)
  - What food group do bell peppers fit in? (*vegetable group*)
  - What part of the plant are you eating when you bell peppers? (*fruit*)
  - What makes a bell pepper a fruit? (*the seeds inside*)
  - Can you name the different colors does bell peppers come in?
    - (*yellow, orange, green, red*)
  
- Cucumbers (vegetable)
  - What food group do cucumbers fit in? (*vegetable group*)
  - What part of the plant are you eating when you eat cucumbers? (*fruit*)
  - What makes a cucumber a fruit? (*the seeds inside*)
  
- Why are bell peppers and cucumbers called fruits but are in the vegetable group of MyPlate? (*Vegetables with seeds inside them are the fruit of the plant but we eat and cook with them as a vegetable. They are not as sweet and are lower in natural sugar than the fruits that belong in the fruit group of MyPlate like grapes and apples.*)
  
- Why is this snack healthy?
  
- Can you think of a fruit that would taste good with this snack? (*pineapple, blueberries*)

Step 6: Have students wash their hands with soap and warm water. Pass out the ingredients for the healthy snack and have students assemble their own. Pass out plates and plastic knives so they can cut the veggies and make their own healthy snack designs.

Step 7: **Let's Eat, Let's Talk.** Eating fruits, veggies and whole grains as snacks is one way to get the fiber, vitamins, and minerals our bodies need. Ask and discuss the questions in **Make Health Happen.**

Step 8: *Remind students to take their recipes home to share with their family.*

*Make Health Happen*

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How can you add more whole grains, fruits, and veggies to your snacks?

Did you try anything new today?

## **BACKGROUND INFORMATION**

- The number of grains one needs to fuel one's body depends on age, sex, height, weight, and activity. It is recommended that students ages 5 to 8 years old consume 4-6 ounce-equivalents of grains (half being whole grains). Grains which are often consumed as bread, rice, and tortillas provide carbohydrates, fiber, B vitamins, and minerals.
- Grains include two subgroups: whole grains and refined grains. Whole grains contain the "whole" grain kernel (bran, germ, and endosperm) and offers more fiber and nutrients compared to refined grains. Whole grains include amaranth, injera, popcorn, whole wheat bread, and whole wheat chapati.
- Each type of vegetable and fruit is unique in what it has to offer nutritionally. By eating a variety of vegetables and fruits, students get the nutrients they need to grow strong.
- Students build up their confidence and self-esteem when they are given the opportunity to prepare food. Students who are given the chance to prepare foods have a greater interest in food and are more likely to try new foods.

## **Healthy Popcorn Cracker** Snack Trivia!

Have students raise hands and answer these trivia questions about today's healthy snack.

Variations on game.

- Have students get into groups to answer questions.
- Give students points for getting answers correct.
  - Students with most points get to help pass out snack ingredients.

### 1. Popcorn crackers

- a. What food group do popcorn crackers fit in? (*grain group*)
- b. Are the popcorn crackers a whole grain? (*yes, they are made from all parts of the popcorn seeds*)
- c. What part of the plant are you eating when you eat popcorn? (*seeds*)
- d. What are other ways to eat corn? (*on the cob, in a salad, salsa or chili, popcorn, tortilla, tamales, tortilla chips*)
- e. Does corn fit in another food group? (*vegetable*)
- f. How did Carlos eat corn? (*corn on the cob, tamales, tortilla, cornmeal pancakes*)

### 2. Hummus

- a. What is hummus made of? (*garbanzo beans*)
- b. What food group does hummus fit in? (*both protein and vegetable*)
- c. What part of the plant are you eating when you eat hummus? (*seeds*)
- d. Why does the hummus look like it does? (*the beans are all mashed together, similar to refried beans*)
- e. Have you ever tried hummus before?

### 3. Bell peppers (vegetable)

- a. What food group do bell peppers fit in? (*vegetable group*)
- b. What part of the plant are you eating when you eat bell peppers? (*fruit*)
- c. What makes a bell pepper a fruit? (*the seeds inside*)
- d. Can you name the different colors bell peppers come in? (*yellow, orange, green, red*)

### 4. Cucumbers (vegetable)

- a. What food group do cucumbers fit in? (*vegetable group*)
- b. What part of the plant are you eating when you eat cucumbers? (*fruit*)
- c. What makes a cucumber a fruit? (*the seeds inside*)

## **Bonus Questions**

### 5. Why are bell peppers and cucumbers called fruits but are in the vegetable group of MyPlate?

- a. (*Vegetables with seeds inside them are the fruit of the plant but we eat and cook with them as a vegetable. They are not as sweet and are lower in natural sugar than the fruits that belong in the fruit group of MyPlate like grapes and apples.*)

### 6. When does corn fit in the grain group and when in the vegetable group?

- a. (*fresh cooked corn fits in the vegetable group; corn meal which is ground dried corn makes up many foods like corn tortillas, cornmeal pancakes and cornbread, popcorn is popped corn seeds that are dried and popcorn belongs in the grain group*)

### 7. Why is this snack healthy?

### 8. Can you think of a fruit that would taste good with this snack? (*pineapple, blueberries, etc.*)

# Corn Seed Experiment

Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Steps for performing my corn seed experiment:

1. \_\_\_\_\_

2. \_\_\_\_\_

3. \_\_\_\_\_

4. \_\_\_\_\_

5. Write your predictions:

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6. After one week, write what happened:

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## Mi Experimento de la Semilla de Maíz

Nombre: \_\_\_\_\_ Fecha: \_\_\_\_\_

### Pasos para realizar el experimento de la semilla de maíz.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_

### Escribe tus predicciones.

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### Después de una semana escribe lo que pasó.

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