SUGGESTED SCHEDULE

Week 1: Eat a Rainbow
Week 2: Taste an Avocado
Week 3: Seeds
Week 4: Transportation of Produce
Optional Activities

BOOKS

Handa’s Surprise by Eileen Browne
Optional (Week Two): Up, Down, and Around by Katherine Ayres
Optional (Week Three): One Bean by Anne Rockwell

NEWSLETTERS

For families
For teachers
Avocados
Week 1: Eat a Rainbow

MATERIALS
- Handa’s Surprise by Eileen Browne
- Fresh Fruit and Vegetable Photo Cards
- Paper and crayons

LEARNING STANDARDS

Head Start Learning Domains
- Language Development (Receptive, Expressive)
- Literacy Knowledge and Skills (Book Appreciation & Knowledge, Phonological Awareness, Alphabet Knowledge, Print Concepts & Conventions, Early writing)
- Logic and Reasoning (Reasoning & Problem Solving, Symbolic Representation)
- Mathematics Knowledge and Skills (Number Concepts & Quantities, Number Relationships & Operations, Geometry & Spatial Sense, Patterns, Measurement & Comparison)
- Physical Development and Health (Physical Health Status, Health Knowledge & Practice, Gross Motor Skills, Fine Motor Skills)
- Science Knowledge and Skills (Science Knowledge & Skills, Conceptual Knowledge of the Natural & Physical World)
- English Language Development (Receptive, Expressive, Engagement in English Literacy Activities)

DRDP-2015
- Approaches to Learning-Self Regulation; ATL-REG1
- Social and Emotional Development; SED3, SED4
- Language and Literacy Development; LLD1, LLD2, LLD3, LLD4
- English Language Development; ELD1, ELD2, ELD3
- Cognition-Math & Science; COG2, COG9, COG10
- Physical Development-Health; PD-HLTH10
- History-Social Science; HSS5

LESSON

1) Select out the Fresh Fruit and Vegetable Photo cards matching all the fruits listed in the book: avocado, banana, guava, mango, orange, passion fruit, and pineapple.

2) Show children a avocado photo card and tell them we are going to learn about avocados this month.

3) Read Handa’s Surprise by Eileen Browne.

4) As you read the story, point out the various fruits and vegetables and ask the children to describe them. Ask: Which ones do you like to eat? Explain that while we call avocados “vegetables” they are really fruits because they have seeds and come from a flower. Talk about how it is important to eat different fruits and vegetables.

5) Ask the children to name the colors and shapes of the different fruits (be sure to include avocados) and count how many are in each page. How many different colors? It is important to eat many colors. What colors do you like to eat?

6) What happens to Handa’s fruit? What was the surprise? Ask the class if they would like that surprise too.

7) In small groups, ask the children to draw a picture of the surprise they would like that has different colored fruits and vegetables.

8) (Optional). You can also talk to the class about the book’s message on sharing.

Students will...
* name seven different fruits including avocados
* count from 1-7
* identify different fruits and vegetables they like to eat
* Discuss the importance of sharing (optional)
Avocados

Week 2: Taste an Avocado

MATERIALS
- Up, Down, and Around by Katherine Ayres (optional)
- Avocado Tree picture
- Food Experience ingredients (save avocado pits for next week’s activity)

LEARNING STANDARDS

Head Start Learning Domains
- Language Development (Receptive, Expressive)
- Literacy Knowledge and Skills (Book Appreciation & Knowledge, Phonological Awareness, Alphabet Knowledge, Print Concepts & Conventions, Early Writing)
- Logic and Reasoning (Reasoning & Problem Solving, Symbolic Representation)
- Mathematical Knowledge and Skills (Number Concepts & Quantities, Number Relationships & Operations, Geometry & Spatial Sense, Patterns, Measurement & Comparison)
- Physical Development (Physical Health Status, Health Knowledge & Practice, Gross Motor Skills, Fine Motor Skills)
- Creative Arts Expressions (Music, Creative Movement & Dance, Art, Drama)
- English Language Development (Receptive, Expressive, Engagement in English Literacy Activities)

LESSON

1) Tell the children today we will be tasting avocados.

2) Ask - How do avocados grow? On a vine like a grape or a tomato (if available show the class the tomato page from Up, Down and Around)? Near the ground like broccoli (if available show the class the book’s page on broccoli)? How about on a tree like an apple? Show the class the picture of an avocado tree.

3) Show the children the different varieties you have for the taste test, noting colors and size. Examine the skin (outside of the avocado) - How are they different, how are they the same? (smooth/light green, bumpy/dark green). Identify the farm they were grown on if you know.

4) Ask- Who has eaten an avocado before? How did you eat it (in a sandwich, in a salad, as guacamole, etc.) Who likes avocados? What colors do you think will be in the inside of an avocado?

5) Cut open one variety of avocado and examine the inside of it. Compare the inside and outside of the avocados— are they the same color? Ask— what part of the avocado do we eat? That’s right the green part around the seed is called the flesh. What is the round, brown thing inside the avocado? It is the seed, just like inside a cherry or a peach, and we call it a pit. If we plant this seed an avocado tree will grow. Can we eat this seed? No.

6) Repeat # 5 with each variety of avocado you have available.

7) Ask the children if they think avocados are a healthy food choice. Explain that avocados are healthy for us because they have protein, Vitamin E, and potassium. They are good for your muscles, eyes, teeth, and bones. Avocados also have a lot of fiber, which is good for your belly.

8) Next, explain that we will taste different avocado varieties but that whenever we eat, we first need to wash our hands. In small groups, have the children wash their hands.

9) As a group, taste one avocado variety at a time. Highlight the difference in texture (bumpy or smooth) between the skin of different types of avocados and the different tastes of the inside flesh.

10) Refer to Conducting an In-Class Taste Test for more ideas on how to engage the class. Have children put a sticker on either the “I Like This” or “I Don’t Like This Yet” columns of the taste test sheet, or have them write or initial their names if they are able to do so.

* Remember to save the avocado pits for next week’s growing activity. Clean and dry (but do not remove the brown protective outer coat or “skin”), and place aside in a safe place.
Snack | Fruit | Vegetables | Bread/Alternative | Meat/Alternative | Milk
---|---|---|---|---|---
3 large Hass avocados* | | | | | 
3 large Fuente Avocados* (or Bacon or other green skin variety) | | | | | 
12 slices whole wheat bread | Salt and pepper to taste | | | | 

**Directions:**

1. Slice one Hass and one Fuente (or other green skin variety) Avocado. Slice each avocado into at least 12 slices. Have the children try a slice of each variety, and compare taste, color, texture.
2. In a bowl mash the remaining avocados with a fork. You can mash the varieties in different bowls or only one variety in each bowl.
3. Add pinch of salt and pepper.
4. Use like butter and spread over bread.
5. Serve one slice per child.

Makes 12 servings

* Varieties of avocados grown in California that you may want to taste: Bacon, Fuente, Gwen, Hass, Lamb Hass, Pinkerton, Reed and Zutano. For more info visit: [http://www.californiaavocado.com/](http://www.californiaavocado.com/)

A ✔️ indicates that this food group qualifies for CACFP crediting. If two categories are checked off, then recipe qualifies for CACFP reimbursement. The nutrition facts are provided to you for CACFP creditable recipes.
<table>
<thead>
<tr>
<th>“I LIKE THIS”</th>
<th>“I DON’T LIKE THIS YET”</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Smiley Face Thumbs Up" /></td>
<td><img src="image2" alt="Confused Face" /></td>
</tr>
<tr>
<td>“ME GUSTA”</td>
<td>“NO ME GUSTA TODAVÍA”</td>
</tr>
</tbody>
</table>
Avocados

Week 3: Seed to Salad

MATERIALS

☐ One Bean by Anne Rockwell (optional)
☐ Avocado pit(s) conserved from tasting last week, cleaned
☐ Toothpicks (three for each pit)
☐ Wide mouth jar (one for each pit)
☐ Water
☐ Assortment of other seeds, such as: beans and sunflower seeds

LEARNING STANDARDS

Head Start Learning Domains

- Language Development (Receptive, Expressive)
- Literacy Knowledge and Skills (Book Appreciation & Knowledge, Phonological Awareness, Alphabet Knowledge, Print Concepts & Conventions, Early Writing)
- Science Knowledge and Skills (Science Knowledge & Skills, Conceptual Knowledge of the Natural & Physical World)
- Logic and Reasoning (Reasoning & Problem Solving, Symbolic Representation)
- Physical Development and Health (Physical Health Status, Health Knowledge & Practice, Gross Motor Skills, Fine Motor Skills)
- Social Science Knowledge and Skills (Self, Family & Community, People & the Environment, History & Events)

DRDP-2015

- Approaches to learning-Self Regulation; ATL-REG1
- Social and Emotional Development SED3, SED4
- Language and Literacy Development; LLD1, LLD2, LLD3, LLD4
- English Language Development; ELD1, ELD2
- Cognition-Math and Science; COG7, COG9, COG10, COG11
- Physical Development-Health; PD-HLTH 10
- History-Social Science; HSS5

LESSON

Optional: Read One Bean by Anne Rockwell

1) Ask the children—How do plants grow? First they are seeds, then they grow roots, sprout leaves, and grow into plants.

2) Take out the different seeds including the avocado pit(s) and show a sample of all the different seeds. See if the children can name the seeds. Talk about the different shapes, sizes, and colors of them.

3) Ask: What will the seed grow into? The seeds will grow into the same plant they came from. For example a bean seeds can only be a bean plant and never a tomato plant. An avocado seed (pit) will grow into an avocado tree. Show the picture of the avocado tree from last week’s lesson.


5) Explain that as a class we will try and sprout our avocado seeds from last week to make an avocado tree.

6) Follow the directions on the attached page for How to Sprout an Avocado Tree.

Students will...

* remember what they learned about seeds, how they are the baby form of a plant
* learn that seeds come in different shapes, sizes, and colors
* Start the process of sprouting an avocado pit in water to grow an avocado tree
How to Sprout an Avocado Tree

Modified from: Centralia School District Nutrition Network, State Preschool Programs

Avocados are easy to sprout from seeds. It is an engaging activity as classes can watch the sprout grow and the measure the growth of the plant. If your school has a garden, the sprouted plant can be transplanted into soil and grown into a tree.

Supplies:

- Avocado seeds, clean and dry
- Toothpicks, 3 per seed
- Wide mouth jar per seed
- Water

Instructions:

1) Stick the toothpicks into the seed. Place toothpicks about halfway from the top to the bottom and space them evenly around the seed.
2) With the small end of the seed pointing up, suspend the seed over the mouth of the jar. Note—the narrower, pointy side is the top that will sprout leaves and the rounder, wider side is the bottom that will grow roots.
3) Fill the jar with water, allowing about a ½ inch of the seed to remain out of the water.
4) Place the jar in a well-lit area, but not in direct sunlight.
5) As water evaporates from jar, refill to the proper level.
6) Wait for the seed to sprout. This will take 5 to 45 days.

Notes on Sprouting:

1) The class can watch the seedling sprout the roots and measure the growth of the plant. The seed will begin to sprout in 5 to 45 days which may be beyond your existing time for your school year, but begin the process so the class can witness the first stages.
2) Watch for the seed to crack open, then a root will grow out from the bottom. Soon a tiny stem will appear from the top of the seed and leaves will grow from the stem. If the seed has not begun to crack and grow within 45 days, discard it and start over.
3) When there are 2 big leaves growing well, you will see tiny new leaves begin to grow from the center of the stem. Pinch off the new growth, leaving only the two big leaves. This will encourage the stem to branch and it will grow stronger.
4) When there are at least 5 leaves, pinch out the new center growth again. This will encourage the plant to grow fuller. The roots should be growing well, coiling around the bottom of the jar.
5) When the plant is about 7-8 inches tall, has well-formed leaves and the jar is thick with roots, it is time to transplant the seedling.

Notes on Growing a Tree:

1) In you have an in-ground or container garden, transplant the seedling in an 8-10 inch pot.
2) Layer about 1 inch of crushed rock into the bottom of a pot. Top the crushed rock with about 2 inches of good-quality potting soil. Gently spread the roots of the seedling over the soil. Fill the pot with soil, allowing about ½ inch of seed to remain above the top of the soil. Water the seedling well, and set the pot in a sunny location.
3) As the tree grows, continue to pinch out some of the new leaves. This will encourage bushy growth.
Avocados

Week 4: Transportation of Produce

MATERIALS
- Avocado pit(s) saved from last week’s taste test
- Toothpicks (three for each pit)
- Wide mouth jar (one for each pit)
- Water
- Assortment of other seeds, such as: beans and sunflower seeds

LESSON
1) Ask the children: how are some ways people get around— walk, bicycle, bus, car, truck, train, plane, etc.
2) Ask: How do you get to school? By car or bus? Does anybody walk?
3) Ask: Does anyone know how avocados get from a tree to you?
4) Have the children stand up and imagine they are avocados traveling from the avocado grove to your dinner plate:
   - Pick the avocados: reach your hands up – way up in the tree and pick an avocado, then put it in your box.
   - Take the box to the warehouse where you wash the avocados
   - Pretend to wash the avocados
   - Pack the avocados: grab forward and put the avocado in a box until it is full.
   - Next, pretend to load the boxes on the truck.
   - Drive the truck to the market: hold the steering wheel and drive the truck...is your truck driving on a bumpy road?
   - (Explain that the farmer can go to two different kinds of markets – to the farmers’ market or to a store. Today we are going to the framers market.)
   - Next, pretend you are at the farmers’ market, unload the box of avocados and place them on the farm stand.
   - Now pretend you are a customer at the farmers’ market. You buy an avocado and...
   - Make guacamole! Use your whole body to stir up your avocados till they are all smooshed and yummy to eat with fresh corn tortillas!
   - Do an avocado dance!

Students will...
* learn about transportation - how avocados get from grove to table
* engage in dramatic play and physical activity for picking, packing, driving, unloading, selling, buying and eating avocados

LEARNING STANDARDS

Head Start Learning Domains
- Language Development (Receptive, Expressive)
- Logic and Reasoning (Reasoning & Problem Solving, Symbolic Representation)
- Science Knowledge and Skills; Science Knowledge & Skills, Conceptual Knowledge of the Natural & Physical World
- Creative Arts Expressions (Creative Movement & Dance, Art, Drama)
- Social Studies Knowledge and Skills; Self, Family & Community, People & the Environment, History & Events
- Approaches to Learning (Initiative & Curiosity, Persistence & Attentiveness, Cooperation)
- Social and Emotional Development; Social Relationships
- Physical Development and Health (Physical Health Status, Health Knowledge & Practice, Gross Motor Skills, Fine Motor Skills)
- English Language Development (Receptive, Expressive, Engagement in English Literacy Activity)

DRDP-2015
- Approaches to Learning-Self Regulation; ATL-REG1
- Social and Emotional Development; SED3, SED4
- Language and Literacy Development; LLD LLD1, LLD2, LLD3, LLD4
- Physical Development; Health; PD-HLTH1, PD-HLTH2, History-Social Science; HSS5
Extending the Learning Experience
Optional Supplemental Lessons

**WEEK 1**

**DRDP-2015**
ATL-REG7, SED3, LLD2, LLD3
ELD1, ELD2, COG9, PD-HLTH2

**Handa’s Surprise Video and Audio**
Picture book animation [http://www.youtube.com/watch?v=y1Vmf4CwvlS](http://www.youtube.com/watch?v=y1Vmf4CwvlS)
Song Version [http://www.youtube.com/watch?v=w2o3PKA4Ms](http://www.youtube.com/watch?v=w2o3PKA4Ms)

**Mystery Fruits**
Get a shoebox and cut a hole in the lid big enough for the students to put their hands inside without being able to see what is inside. Put a fruit inside the box – the squishier the better!
Have children guess which fruit is inside the box by feeling the texture and shape of the fruit. You can do this activity using several boxes with different fruits, or just one box. Discuss with the students what they think was inside. Reveal the fruits, and then discuss how the students were able to guess the mystery fruit!

**Four Corners: How does it grow?**
In this classroom-game, students have to think about how a fruit or vegetable grows. Designate each corner of the room to be a different growing method: underground, in a bush, in a tree, or on a vine, etc.
Using your fruit and vegetable photo cards, show a fruit and vegetable. Students will have to decide which corner to go to, depending on how the fruit or vegetable is grown. For example, if you show the carrot photo card, then the children would go to the corner designated “underground.”

**Discovery Lab**
Place various whole avocados on the tables in your classroom for students to examine by measuring and comparing. Make available scientific tools such as measuring tapes and rulers, a scale, pH strips, magnifying glasses, and tweezers.
Make available paper, pencils and crayons for students to draw their observations. Teachers can write down the student’s observation on each student’s paper or collectively on one large paper and collectively discuss the observations.
As the activity progresses, cut a cross section of the produce and have students compare the cut pieces to the whole piece. Encourage students to separate the parts and examine them.

**Seed Collage**
This activity makes great use of all the seeds you have collected in discovery labs and from taste tests. If you do not have enough seeds add a bag of bean soup mix and/or seeds from expired seed packets.
Give each child a large piece of construction paper. Put the seeds into small bowls. Have them glue the seeds in various places on the construction paper. While they are creating it, encourage them to discuss the types of seeds they are using.
To take this activity one step further, have students label each type of seed they used or draw the mature plant next to the seeds.

**WEEK 2**

**DRDP-2015**
ATL-REG1, SED3, LLD1, LLD3
ELD1, COG11, HSS5

**WEEK 3**

**DRDP-2015**
ATL-REG6
PD-HLTH4

**WEEK 4**

**DRDP-2015**
PD-HLTH1, PD-HLTH2

**Yoga Pose- Avocado Tree**
1. Stand tall and strong like a healthy avocado tree (A).
2. When your legs are deeply rooted and balanced, breathe in and raise your arms out to your sides like the branches of an avocado tree (A).
3. Lift your right leg and place that foot on the inner part of your left leg (B).
4. Hold for 2 breaths.
5. Raise your arms higher and wiggle your fingers like leaves on the “Avocado Tree” (C).

Adapted from [http://www.cdph.ca.gov/programs/cpns/Documents/Network-shapeofyoga.pdf](http://www.cdph.ca.gov/programs/cpns/Documents/Network-shapeofyoga.pdf)
Food Experience: Avocado and cactus salad

| Serves 12  | Prep time: 10 minutes | Cook time: None |

Ingredients:

- 2 (16 oz.) can of sliced cactus, drained and rinsed
- 2 cup diced Roma tomato
- 1/2 cup diced onion
- 1/2 cup fresh lemon juice
- 2 tablespoons chopped cilantro
- 8 oz. diced pepper jack cheese
- 2 cup diced avocados
- Sea salt and pepper to taste

Directions:

1) Mix all ingredients except for avocado and cheese.
2) Refrigerate for a few hours or overnight
3) Add avocado and cheese just before serving

Makes 12 servings

Materials Needed

- Cutting board
- Knife
- Large bowl
- plates

Chef’s Notes
### Food Experience: Avocado Green Onion Dip

**Serves 24 · Prep time: 15 minutes · Cook time: None**

#### Ingredients:
- 3 medium avocados, seeded and peeled
- 1 ½ cups of low fat cottage cheese
- 1 ½ containers of (6 oz) plain non-fat yogurt
- ¾ cup plus 2 tbsp non-fat mayonnaise
- 3/4 cup sliced green onions
- ¼ cup plus 2 tbsp grated carrot
- ¼ cup plus 2 tbsp fresh lemon juice
- 1 box reduced-fat Wheat Thins

#### Directions:
1. Dice avocado into small pieces and toss with lemon juice. Set aside.
2. In a blender, blend cottage cheese, yogurt and mayonnaise until smooth.
3. Add avocado/lemon juice, green onions and carrots and blend.
4. Cover and refrigerate for a couple of hours
5. Serve (1/4 cup) with 2-4 crackers.

**Makes 24 taste tests (1/4 cup)**

Recipe adapted from OCDC Network for a Healthy CA, PreK Harvest Tools, April-August 2010

### MATERIALS NEEDED
- Blender
- Cutting board
- Knife
- plates

### CHEF’S NOTES
Food Experience: Avocado Kabobs

Serves 24 · Prep time: 10 minutes · Cook time: None

Ingredients:
- 4 red apples (cored and cubed)
- 2 cups red grapes
- 1 large Hass avocado (peeled and cubed)
- 24 pretzel sticks (about 4 inches long)
- 3 ounces low-fat or non-fat cheddar cheese, cubed

Directions:
1) Wash fruit well and prepare as directed.
2) Use a wooden skewer to poke holes in the center of each piece of apple, grape, cheese and avocado.
3) Place a piece of each fruit on the student’s plate with a pretzel stick.
4) Have the students thread the pieces of fruit onto the pretzel stick through the holes.

Makes 24 taste tests (1 kabob each)

Recipe adapted from: Kids...Get Cookin’! California Children’s 5 a Day-Power Play!

MATERIALS NEEDED
- Cutting board
- Knife
- wooden skewer
- plates

CHEF’S NOTES

<table>
<thead>
<tr>
<th>Snack</th>
<th>Fruit</th>
<th>Vegetables</th>
<th>Bread/Alternative</th>
<th>Meat/Alternative</th>
<th>Milk</th>
</tr>
</thead>
</table>

A ✅ indicates that this food group qualifies for CACFP crediting. If two categories are checked off, then recipe qualifies for CACFP reimbursement. The nutrition facts are provided to you for CACFP creditable recipes.
Healthy Serving Ideas
• Use avocados to make guacamole and salsa dips. Serve with baked tortilla chips, baked potatoes, or salads.
• Mash avocados and spread on sandwiches instead of mayonnaise.
• Top scrambled eggs with diced avocados instead of cheese.

For more ideas, visit:
www.cachampionsforchange.net

Let’s Get Physical!
• Make plans for you and your child to ride your bikes to work and school.
• If riding bikes to work or school is not possible, plan a bike ride in your neighborhood or other safe route.
• Let each family member pick one new game or activity each week that your family can try together.

For more ideas, visit:
www.bikeleague.org

AVOCADO TORTILLA SOUP
Makes 8 servings. 1 cup per serving.
Total time: 30 minutes

Ingredients:
3 (14-ounce) cans low-sodium chicken broth
2 (10¾-ounce) cans low-sodium condensed tomato soup
½ bunch cilantro, leaves only
3 cloves garlic, finely chopped
½ teaspoon ground black pepper
1 ripe avocado, peeled, pitted, and chopped
8 corn tortilla chips, crumbled

1. In a large pot over high heat, combine chicken broth, tomato soup, cilantro, garlic, and pepper. Bring to a boil, then reduce heat and simmer for 10 minutes.
2. Cool slightly, then purée small batches in a blender.
4. Serve warm or chilled. Sprinkle with crumbled tortilla chips.

Nutrition information per serving:
Calories 134, Carbohydrate 17 g, Dietary Fiber 2 g, Protein 5 g, Total Fat 6 g, Saturated Fat 1 g, Trans Fat 0 g, Cholesterol 0 mg, Sodium 350 mg

Adapted from: Everyday Healthy Meals, Network for a Healthy California, 2007.

How Much Do I Need?
• A ½ cup of sliced avocado is about one cupped handful.
• A ½ cup of sliced avocado is a good source of fiber, vitamin C, vitamin B₆, folate, potassium, and vitamin K.
• Avocados are also a good source of monounsaturated fat, which is a healthy fat for your body needs.
• Monounsaturated fat is an oil that helps lower the “bad” cholesterol in your body and may help raise the “good” cholesterol.
• Healthy fats can be found in canola oil, nuts, olives, olive oil, and some cold water fish varieties (salmon, canned light tuna, rainbow trout, cod, halibut).

The amount of fruits and vegetables that each person needs depends on age, gender, and physical activity level. Look at the chart below to find out how much each person in your family needs. Then, make a list of everyone’s favorite fruits and vegetables. Add these to everyday meals and snacks to help your family get the recommended amount of fruits and vegetables every day.

Recommended Daily Amount of Fruits and Vegetables*

<table>
<thead>
<tr>
<th></th>
<th>Kids, Ages 5-12</th>
<th>Teens and Adults, Ages 13 and up</th>
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</thead>
<tbody>
<tr>
<td><strong>Males</strong></td>
<td>2½ - 5 cups per day</td>
<td>4½ - 6½ cups per day</td>
</tr>
<tr>
<td><strong>Females</strong></td>
<td>2½ - 5 cups per day</td>
<td>3½ - 5 cups per day</td>
</tr>
</tbody>
</table>

*If you are active, eat the higher number of cups per day. Visit www.mypyramid.gov to learn more.
Ideas Saludables de Preparación
- Use aguacates para preparar guacamole y salsas de aguacate.
- Machaque el aguacate y úntelo en los Sandwiches o tortas en vez de usar mayonesa.
- Prepare huevos revueltos y agregue aguacate picado en lugar de queso.
Para más ideas, visite: www.campeonesdelcambio.net

SOPA DE AGUACATE Y TORTILLA
Rinde 8 porciones. 1 taza por porción. Tiempo de preparación: 30 minutos
Ingredientes:
3 latas (14 onzas) de caldo de pollo bajo en sodio
2 latas (10¾ onzas) de sopa de tomate condensada, baja en sodio
½ manojo de cilantro, solo las hojas
½ cucharadita de pimienta negra molida
1 aguacate maduro, pelado y picado
8 chips de tortilla de maíz, en trocitos
1. En una olla grande, a fuego alto, mezcle el caldo de pollo, la sopa de tomate, el cilantro, el ajo y la pimienta negra molida. Deje que hierva, reduzca el fuego y deje hervir a fuego lento por 10 minutos.
2. Deje enfriar un poco y luego líche la mezcla en porciones pequeñas en una licuadora.
3. Ponga nuevamente en la olla, agregue el aguacate y caliente bien.
4. Sirva tibia o fría. Agregue trocitos de chips de tortilla.

Información nutricional por porción: Calorías 134, Carbohidratos 17 g, Proteínas 5 g, Grasas 6 g, Vitamina A 2%, Calcio 1%, Vitamina C 12%.

¿Cuánto Necesito?
- Una ½ taza de aguacate rebanado equivale a un puñado.
- Una ¼ taza de aguacate rebanado es una fuente buena de fibra, vitamina C, vitamina B₆, folato, potasio y vitamina K.
- Los aguacates son también una fuente buena de grasa monoin saturada, que es la grasa saludable que necesita su cuerpo. Esta grasa ayuda a bajar el colesterol “malo” en su cuerpo y ayuda a aumentar el colesterol “bueno.”
- Puede encontrar grasas saludables en el aceite de canola, nueces, aceitunas, aceite de oliva y algunas variedades de peces de agua fría (salmón, atún, atún enlatado bajo en calorías, trucha arco iris, bacalao y halibut).

La cantidad de frutas y verduras que necesita cada persona depende de su edad, sexo y nivel de actividad física. Consulte la tabla siguiente para saber la cantidad que necesita su familia. Agregue frutas y verduras a las comidas y bocadillos diarios para ayudar a su familia a obtener la cantidad recomendada de frutas y verduras todos los días.

Recomendación Diaria de Frutas y Verduras*

<table>
<thead>
<tr>
<th>Niños, de 5 a 12 años</th>
<th>Adolescentes y Adultos, de 13 años en adelante</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Hombres</strong></td>
<td><strong>Mujeres</strong></td>
</tr>
<tr>
<td>2½ - 5 tazas por día</td>
<td>2½ - 5 tazas por día</td>
</tr>
<tr>
<td>4½ - 6½ tazas por día</td>
<td>3½ - 5 tazas por día</td>
</tr>
</tbody>
</table>

*Si es activo, coma el número más alto de tazas por día. Visite www.mipiramide.gov para aprender más.
Health and Learning Success Go Hand-In-Hand

Eating a variety of colorful fruits and vegetables in daily meals can increase academic performance and cognitive functioning, especially for undernourished students. Help students eat more fruits and vegetables by encouraging them to participate in school meal programs, including the Summer Food Service Program. It can help students to eat more fruits and vegetables. Use Harvest of the Month to connect with core curricula and teach students about California’s bounty of fruits and vegetables and how to lead a healthy, active lifestyle.

Exploring California Avocados: Taste Testing

What You Will Need (per group of 8 students):
- One ripe Hass avocado*
- Paring knife and cutting board
- Printed copies of avocado botanical image**
- White board and pens

*Refer to Botanical Facts on page 2 on how to choose ripe avocados.

Activity:
- Observe and record the color, texture, smell, and sound (when lightly tapped) of avocado.
- Slice avocado in half; observe and record observations of flesh (color, texture, smell, taste).
- Use the botanical image to compare and contrast the fruit around the outer peel and the pit; record observations on white board; discuss findings.
- Discuss how to choose ripe avocados and/or ripen at home.
- Optional: Discuss ethylene gas and its role in ripening fruit.


Cooking in Class: California Stacker

Makes 32 servings at 1 cracker each

Ingredients:
- 3 ripe avocados
- 1 (16-ounce) basket of small tomatoes (e.g., pear, cherry)
- Whole wheat reduced fat crackers
- Small plates or napkins

1. Cut avocados in half. Remove the peel and pit and place in a bowl.
2. Dice avocados with a knife and mash, leaving some chunks.
3. Stack 1 tablespoon of avocados on 1 cracker. Stack one tomato on top.
4. Serve immediately on plates or napkins.

Nutrition information per serving:
- Calories 54
- Carbohydrate 7 g
- Dietary Fiber 2 g
- Protein 1 g
- Total Fat 3 g
- Saturated Fat 0 g
- Cholesterol 0 mg
- Sodium 50 mg

Adapted from: Tasting Trio Team, Network for a Healthy California, 2010.

Reasons to Eat Avocados

A ½ cup of sliced avocados is:
- An excellent source of fiber and monounsaturated fat.
- A good source of vitamin C, vitamin B_6, folate, potassium, and vitamin K.
- A source of many vitamins and minerals including vitamin E, riboflavin, niacin, and magnesium.

Champion Sources of Monounsaturated Fat*:
- Avocados
- Canola oil
- Nuts
- Olives
- Olive oil
- Some cold water fish varieties (salmon, rainbow trout, cod, halibut, canned light tuna, anchovies, sardines)

*Champion sources provide a good or excellent source of healthy monounsaturated fat (at least 10% Daily Value).

Nutrition Facts

<table>
<thead>
<tr>
<th>Serving Size</th>
<th>Calories</th>
<th>% Daily Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>½ cup avocado, sliced (73g)</td>
<td>117</td>
<td></td>
</tr>
<tr>
<td>Calories from Fat</td>
<td>89</td>
<td></td>
</tr>
<tr>
<td>Total Fat</td>
<td>11g</td>
<td>16%</td>
</tr>
<tr>
<td>Saturated Fat</td>
<td>2g</td>
<td>8%</td>
</tr>
<tr>
<td>Trans Fat</td>
<td>0g</td>
<td>0%</td>
</tr>
<tr>
<td>Cholesterol</td>
<td>0mg</td>
<td>0%</td>
</tr>
<tr>
<td>Sodium</td>
<td>5mg</td>
<td>0%</td>
</tr>
<tr>
<td>Total Carbohydrate</td>
<td>6g</td>
<td>2%</td>
</tr>
<tr>
<td>Dietary Fiber</td>
<td>5g</td>
<td>20%</td>
</tr>
<tr>
<td>Sugars</td>
<td>0g</td>
<td></td>
</tr>
<tr>
<td>Protein</td>
<td>1g</td>
<td></td>
</tr>
</tbody>
</table>

Vitamin A 2% Calcium 1%
Vitamin C 12% Iron 2%

For more information, visit: www.nal.usda.gov/fnic/foodcomp/search/ (NDB No.: 09037)
What Are Fats?

- Fats are nutrients that help make cells and help absorb certain vitamins.
- There are nine calories in one gram of fat.
- Fats come in many forms and some are healthier than others.
- Monounsaturated and polyunsaturated fats are healthier fats. They are usually oils that help to lower “bad” cholesterol (LDL) levels and may raise the “good” cholesterol (HDL) levels.
- Both monounsaturated and polyunsaturated fats are found in plants, nuts, and fish.
- Saturated and trans fats are usually solid fats that raise the “bad” cholesterol (LDL). Trans fats also lower the “good” cholesterol (HDL).
- Saturated fats are normally found in animal products (e.g., butter, whole milk, beef, pork), while trans fats come from hydrogenated vegetable oils (e.g., shortening, margarine) used in packaged foods like cakes, crackers, and fried foods.
- Omega-3 fatty acids may decrease the risk of heart disease. This is the type of fat found in cold water fish (see Champion Sources on page 1).

For more information, visit: www.mayoclinic.com/health/fat/NU00262

Botanical Facts

Pronunciation: āvə-kä’dō
Spanish name: aguacate
Family: Lauraceae
Genus: Persea
Species: P. americana

Avocado is an evergreen fruit tree of the flowering plant family Lauraceae. Originally called ahuacatl by the Aztecs of ancient Mexico, the fruit later became known as aguacate by the Spanish in the 16th century and nicknamed the “alligator pear” by English colonists who mistakenly substituted “alligator” for aguacate and added “pear” for the fruit’s shape. The term aguacate eventually evolved into avocado by Americans who could not pronounce the Spanish.

Many people think avocados are vegetables, but they are a fruit*. There are more than 80 different varieties grown in California, but the Hass avocado is the most common. The skin of Hass avocados turn dark purple-black when ripe. Other varieties are known as “greenskins” because their skins remain green and do not change color as they ripen. These include Fuerte, Zutano, Bacon, Pinkerton, Reed, and Gwen.

*Do Student Sleuths (page 3) to learn why avocados are botanically fruits.

For more information, visit:
http://food.oregonstate.edu/faq/avocado/faq_avocado3.html

How Do Avocados Grow?

Mature avocado trees grow to between 20 and 80 feet tall, depending on the variety, pruning, and soil conditions. If grown from seed, the tree will produce fruit after five to 20 years. It is biennial-bearing and may produce heavy crops one year followed by poor yields in the next. Intolerable to freezing temperatures, this evergreen tree can only grow in subtropical and tropical climates*.

To produce fruit within one to two years, commercial avocado orchards are planted using grafted trees and rootstocks. The species is unable to self-pollinate and most cultivars are clonally propagated (without seed reproduction). The avocado fruit does not ripen on the tree but will fall off and ripen on the ground. Commercial avocados are picked unripe and shipped to ripen on the store shelf.

For more information, visit:
www.crgf.org/pubs/ffl/avocado.html
www.ucavo.ucr.edu

How Much Do I Need?

A ½ cup of sliced avocados is about one cupped handful. The amount of fruits and vegetables that each person needs depends on age, gender, and physical activity level. Have students find out how many cups they need to eat every day. Students can make a list of their favorite fruits and vegetables and describe what they like best about them. Encourage students to share lists with family members.

<table>
<thead>
<tr>
<th>Recommended Daily Amount of Fruits and Vegetables*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kids, Ages 5-12</td>
</tr>
<tr>
<td>Males</td>
</tr>
<tr>
<td>Females</td>
</tr>
</tbody>
</table>

*If you are active, eat the higher number of cups per day. Visit www.mypyramid.gov to learn more.

Adapted from: Tall and Tasty Fruit Trees, Meredith Sayles Hughes, 2000.

To download reproducible botanical images, visit www.harvestofthemonth.com.
School Garden: Avocado Trees
If your school has a garden, here is an activity you may want to implement.
Look for donations to cover the cost of seeds, tools, irrigation systems, electric pumps, and any salary incurred by garden educators or others.
Students can grow their own miniature avocado tree at home. Have students write down the following steps and take home with materials and Avocados Family Newsletter*.

What Students Will Need:
- One large avocado seed, washed
- Three toothpicks
- Glass jar
- Large pot (about 10½-inch diameter)
- Humus soil for pot

Activity:
- Use toothpicks to suspend seed (broad end down) over water-filled jar. Seed should be covered about one inch.
- Place jar in warm place out of direct sunlight. Replenish water as needed.
- Roots and stems will sprout in about two to six weeks.
- When stem is about seven inches long, cut back to three inches.
- When roots are thick and stems have leaves again, transplant to pot leaving the seed half-exposed.
- Water lightly and frequently. Keep soil moist, not saturated**.

**Hint: Yellow leaves are a sign of over-watering; let plant dry out for a few days. Brown or fried leaves are a sign that there is too much salt in the soil. Allow water to run freely in the pot and drain for several minutes.

Adapted from: www.avocado.org

Just the Facts
Avocado trees can grow as tall as 80 feet and produce as many as 400 pieces of fruit annually.
The United States provides 6% of the world’s avocado crop, ranking third behind Mexico and Chile.
Almost half of American households purchase avocados. Consumers love the rich, creamy texture of the Hass avocado and growers favor it for its disease-resistance and year-round growing cycle.
The Hass avocado is commonly misspelled as Haas.
Source:

Home Grown Facts
California ranks first nationally in avocado production, growing more than 90% of the nation’s crop.
Avocados are grown mainly along the coastline of Southern California. San Diego County leads the State, followed by Ventura, Riverside, Santa Barbara, and San Luis Obispo counties.
Although avocados are grown year-round, more than 75% of California’s shipments take place between March and August.

For more information, visit:
www.cdfa.ca.gov

A Slice of Avocado History
- Native to the tropics of Central America, the avocado tree originated in southern Mexico and Columbia around 7,000 years ago.
- Spanish conquistadors were presented with avocados in Central America by the Aztecs and Incas in the 16th century.
- By the early 1800s, the avocado tree had spread throughout southern Europe, the Hawaiian Islands, Africa, and Southeast Asia.
- The avocado tree was first introduced to the United States in 1833 by Judge Henry Perrine who sent trees from Mexico to Florida.
- Dr. Thomas White of the California State Agricultural Society imported the first avocado tree from Nicaragua to Los Angeles in 1856.
- The California avocado industry was founded in the early 1870s when trees in Santa Barbara (imported from Mexico) begin to bear fruit.
- Avocado grower Rudolph Hass developed the Hass variety in 1932. He grafted seedlings onto existing trees that had previously produced the Lyon variety.

For more information, reference:
Cool as a Cucumber, Hot as a Pepper, Meredith Sayles Hughes, 1999.

Student Sleuths
1 Some fats are considered good fats. What are they? What function do they play in the body? What food sources provide them?
2 Essential fatty acids are fats the body needs. Avocados provide sources of omega-3 and omega-6 fatty acids. Why are omega-3 and omega-6 fatty acids essential to our bodies? What are some of the health benefits they provide? Make a list of healthy foods that contain these essential fatty acids and identify which of these foods you eat daily and weekly.
3 All fruits are classified into two broad categories: dry and fleshy. The two main classes of fleshy fruits are drupes and berries. What kind of fruit is the avocado and why? Why is the avocado more commonly known as a vegetable?
4 Avocados do not ripen on the tree and are commonly shipped unripe to prevent damage. Research the process of how avocados are harvested and shipped to market. Find out how long it takes on average for avocados to ripen once picked. Develop an experiment to speed up the ripening process. Present your results using charts and timelines to California avocado growers (by e-mail or letters).

For information, visit:
www.nal.usda.gov/fnic/foodcomp/search/
www.ucavo.ucr.edu
Physical Activity Corner
Start off the day with basic activities to get the brain and body ready to learn. Before beginning, review the proper form for various stretches.
- Students stand beside their desks.
- Start with a few basic stretching movements. Do each stretch for 15 seconds. (Examples: reach for sky, then touch toes, arm circles, wrist circles, ankle circles, gentle neck stretches, hamstring stretch, quadriceps stretch, standing calf stretch.)
- Lead students in one aerobic activity for 30 seconds. (Examples: jumping jacks, jumping, imaginary jumping rope, dancing.)
- Follow with a strength-building exercise. Do one or two sets with 15 repetitions. (Examples: overhead book press, biceps curls, heel raises, squats, lunges.)
- Practice balance exercises. Balance on one foot for 15 seconds, then switch legs and repeat.


Cafeteria Connections
- Grades K – 5: Show students how easy it can be to grow a tree from seed. Implement the School Garden activity on page 3. Put the avocado seedling prominently on display in cafeteria. Engage students by having them help you water and trim the stem. At the end of the school year, give the seedling to a classroom.
- Grades 6 – 12: The avocado has a rich, cultural history. It is used internationally in recipes and was considered a treasure in ancient times and commonly presented as a gift. Celebrate diversity in the cafeteria by sponsoring an “Around the World with Avocados” activity.

Ideas to Get Started:
- Involve students or entire classrooms.
- Display students’ work in the cafeteria.
- Students select a country or group of people and research how the avocado has been used.
- Students develop a timeline and/or draw a cultural map to show findings.
- Students can include healthy avocado recipes.

For more information, visit:
www.cfaitc.org/books

Student Champions
Encourage students to read Nutrition Facts labels and know what types of fats (trans, saturated, unsaturated) are in certain food items.
- Record what foods are on the school campus.
- Analyze the nutrients for these items, noting fat content.
- Make a list of items that contain trans fats and high levels of saturated fats (e.g., above 20 percent of the recommended Daily Value).
- Write a letter to school officials requesting that healthy food items be sold on campus.
- Include reasons in the letter why these healthier items should be provided and list examples to replace less nutritious items.

Note: This activity can also be implemented by analyzing the sugar content of vending machine items (foods and drinks).

*To learn about fats, refer to What Are Fats? (page 2) and/or complete Student Sleuths (page 3).

Adventurous Activities
Science Investigations:
- Cut two avocados in half and remove seeds. Squeeze lemon juice over one half, apple juice over another, salt over another, and leave the fourth one alone. Discuss oxidation as a class.
- Cut open an avocado seed. Identify the seed parts: embryo, cotyledons, and seed coat. Draw the seed’s cross-section.
- Study the parts of a flower’s matured ovary (the fruit). Cut open an avocado. Identify the three pericarp layers: exocarp, mesocarp, and endocarp. Discuss which facts classify the avocado as a fruit.


For more ideas, visit:
www.harvestofthemonth.com

Literature Links
- Secondary: Americans in Agriculture: Portraits of Diversity by USDA, Cool as a Cucumber, Hot as a Pepper: Fruit Vegetables by Meredith Sayles Hughes, New Junior Garden Book by Felder Rushing and Seedfolks by Paul Fleischman.

For more ideas, visit:
www.cfaitc.org/books

This material was produced by the California Department of Public Health’s Network for a Healthy California with funding from USDA SNAP, known in California as CalFresh (formerly Food Stamps). These institutions are equal opportunity providers and employers. CalFresh provides assistance to low-income households and can help buy nutritious foods for better health. For CalFresh information, call 1-877-847-3683. For important nutrition information, visit www.cachampionsforchange.net. © 2011