

Cucumbers

COOKING IN THE CLASSROOM

Crispy, crunchy cucumbers can make us feel cool and refreshed in warm weather. Make this tasty snack with the class on a warm afternoon.

Cucumber Snack Supplies

2-3 cucumbers, washed and sliced thinly (only peeled if waxy)

Whole-grain crackers (like Triscuits) or small whole wheat pita pockets

1 package of cream cheese or Neufchâtel cheese

Small napkins or paper towels

Butter knives for spreading cream cheese

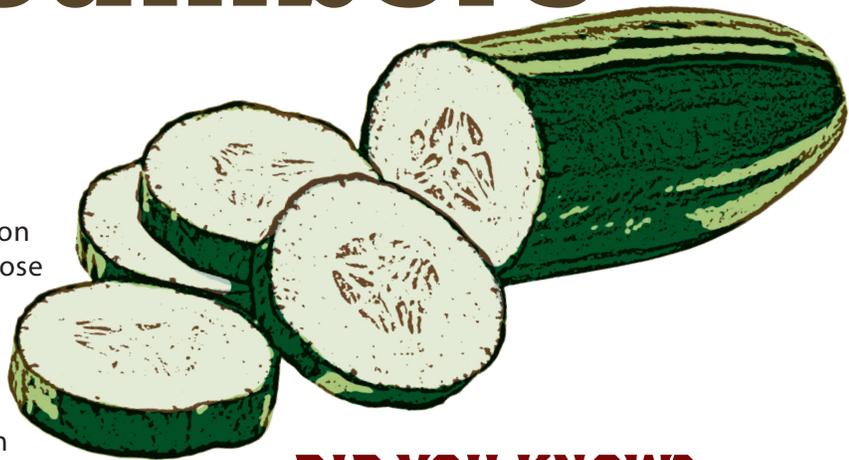
Paper "boats" (you can probably ask the kitchen manager for a few)

Ahead of time, slice the cucumbers. Put a slab of cream cheese and enough cucumber slices for 1-2 per student in a small paper boat. Each boat can carry enough supplies for a table group of 4-6 students.

Have students take turns with the knives, spreading the cream cheese onto the cracker or into the pita pocket. Stick a cucumber slice on top. Enjoy the combination of crunchy, creamy, and crispy!

HOW IT'S GROWN

Cucumbers grow on vines that grow close to the ground. Since the plant likes to spread out, some farmers help them grow up a fence or a trellis in order to save space. Farmers and gardeners plant cucumbers between May and June, and they grow through the summer months. Cucumber plants have wide leaves and small yellow flowers. Bees carry pollen from the male flowers to the female flowers, and then cucumbers start to grow. Cucumbers grow best when there is hot summer weather and a lot of sun, so sometimes they do not grow as well in Seattle summers. Sometimes cucumbers are grown inside of a greenhouse or a "hot house," which helps them to grow even when it is not warm enough temperatures outside.



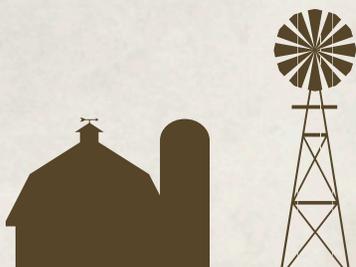
DID YOU KNOW?

In Washington, cucumbers grow best in the summer where there is hot weather. Use these tips to make sure you eat a delicious, sweet, and fresh cucumber:

- Select cucumbers that have smooth, dark green, firm skin.
- Choose cucumbers that feel heavy for their size.
- Avoid cucumbers that have soft spots.
- Store them in a bag or crisper drawer in the refrigerator for up to 1 week.
- In the winter, cucumbers that come from other countries are covered with wax for protection. Peel the wax off before eating.

Source:

http://www.fruitsandveggiesmorematters.org/?page_id=205



STUDENT SLEUTH

WATER FACTS

Individually or as a class, read this article about water and our health then answer the following questions:

“Why Drinking Water is the Way to Go,” http://kidshealth.org/kid/stay_healthy/food/water.html

When do you need to drink even more water? (In warm weather and during exercise)

What brings oxygen to all the cells in your body? (Blood)

What are the best drink choices to get more water into your body? (Water, milk)

What is the part of your immune system that fights off illness? (Lymph)

What should you do if your pee is very dark yellow? (Drink water!)

What is it called when you don't drink enough water? (Dehydration)

What is the main ingredient in sweat? (Water)

WORD SENSE

Some vegetables and fruits are more than 90% water. These are especially refreshing to eat! Unscramble these fruit and veggie names to learn which eight fruits and vegetables contain the most water.

OATTMOSE _____
(tomatoes)

YREELC _____
(celery)

MUBRCEUSC _____
(cucumbers)

NOLSEM _____
(melons)

AEURGRITFP _____
(grapefruit)

REWEBRTSSARI _____
(strawberries)

NASPICH _____
(spinach)

BEGCABA _____
(cabbage)

Teachers: give students a list of the items to help them unscramble the words

Source:

vegetable list comes from http://www.harvestofthemoth.com/download/Spring/Cucumber/Cucumber_Menu.pdf

LITERATURE LINKS

PRIMARY

Students can learn about garden insects and cooperation when reading *Cucumber Soup*, by Vickie Leigh Krudwig (Fulcrum Publishing, 1998).

Taste cucumbers, observe the seeds, and then read *From Seed to Plant*, by Gail Gibbons (Holiday House, 1993).

Learn about different categories of vegetables with *The Vegetables We Eat*, by Gail Gibbons (Holiday House, 2008).

SECONDARY

Discuss the botanical difference between “fruits” and “vegetables” by reading *Cool as a Cucumber, Hot as a Pepper: Fruit Vegetables*, by Meredith Sayles Hughes (Lerner Publications, 1998).

ADVENTUROUS ACTIVITIES

MATH

Our bodies are 60-65% water, and cucumbers are 95% water! What are those percentages in decimal points? Using this worksheet, practice putting decimal points in order from least to greatest, and solve this cucumber riddle: <http://www.hawthorne.k12.ca.us/ourpages/auto/2010/5/21/41301654/Middle%20School%20cucumber%20math.pdf>

SCIENCE

Water is important for our bodies, and plants need it to grow too! With too little water, plants cannot grow. With too much water, plants will drown. Learn about how seeds grow with water by sprouting plants for your school garden. First, conduct this science experiment from the California School Garden Network (link below). Then discuss what the results mean for our home and school gardens and for farmers in Washington. <http://www.csgn.org/images/pdf/WaterWeDoing.pdf>

LANGUAGE ARTS: VOCABULARY

Discuss the five senses with students and practice describing different sensations. Draw a diagram of the senses and brainstorm adjectives that we use with each sense. For an example, see the “Adjectives to Describe Fruits and Vegetables Using THE FIVE SENSES” worksheet available here: <http://www.hawthorne.k12.ca.us/ourpages/auto/2010/5/21/41301654/K-5%20activity%20sheets%20-%20Cucumber.pdf>

Next, conduct a taste test: each student gets a napkin or paper towel with a piece each of cucumber, dill pickle, and sweet pickle. Have students consider and describe each item using adjectives and draw a classroom chart to list the similarities and differences.

SCHOOL GARDEN

FOCUS: INSECTS

Are all insects bad? Explore your school garden to learn about the insects that live and visit there. Take the class to observe insects, record what they are doing, and draw the types of insects they see. Discuss how some insects are helpful to the plants and soil and how others are harmful (i.e. through eating the plants). Use this lesson "Earth, Planet of the Insects" to structure your garden investigation: <http://www.csgn.org/images/pdf/EarthPlanetOfInsects.pdf>

GOOD NUTRITION

- Cucumbers are a great source of water. Did you know that WATER is the most important nutrient for our bodies?
- The water in cucumbers keeps our body temperatures normal.
- Staying hydrated with water gives us energy and helps us focus.
- Cucumbers also have some Vitamin K. This vitamin helps stop the bleeding when our skin is cut.
- Most Americans eat approximately 8 pounds of pickles each year. These pickles contain a lot of salt; fresh cucumbers are better for our bodies.

Adapted from California Harvest of the Month materials.

BOTANICAL FACTS

Family: Cucurbitaceae | Genus: Cucumis
Species: C. sativus

There are two main types of cucumbers: slicing cucumbers that we eat fresh and pickling cucumbers, which are turned into pickles. The slicing cucumbers are longer (about 9 inches) with smooth, dark green skin. Pickling cucumbers are shorter, lighter, and usually have bumpy skin. Cucumbers are part of the gourd plant family, so they are related to squash, pumpkins, watermelons, melons, and zucchini!

Sources:

<http://extension.umaine.edu/publications/4254e/>



STUDENT ADVOCATES

Cucumbers provide us with a lot of water, one of the most important nutrients for our bodies. All of our organs need water to work properly. Did you know that our bodies are approximately 60% water?

Most people need to drink about 8 glasses of water per day. Unfortunately, instead of drinking water, we drink a lot of sugar-loaded drinks like soda, lemonade, and sports drinks. Have students research and discuss the problem with drinking too much sugar. Have them educate their families as well, and form a pledge that students and families sign to avoid sugar-loaded beverages for one week.

JUST THE FACTS

- Cucumbers come in many varieties. Some of the names include English, Japanese, Sweet Success, Persian, Apple, Pickalot, and Lemon cucumber.
- Cucumbers are related to squash, pumpkins, zucchini, and melons!
- Cucumbers are originally from India. They have been grown by humans for over 3,000 years.
- A cucumber can be 20 degrees F cooler inside than on the surface.
- Skinny or thin cucumbers usually have fewer seeds.
- A cucumber flower needs 10-20 visits from a bee per day in order to have enough pollen to grow a long, straight cucumber.



HEAL IS A COLLABORATION BETWEEN SEATTLE PUBLIC SCHOOLS NUTRITION SERVICES, HEALTH EDUCATION, PHYSICAL EDUCATION AND RISK MANAGEMENT DEPARTMENTS.

Name _____

Cucumbers

