

School:

Teacher:

November's Healthy Habits Campaign Message is:

Be kind to your body – eat a rainbow of fruits and vegetables every day!

Healthy eating habits are an important component of lifelong health. One of the best ways to make sure you eat a healthy variety of fruits and vegetables – and all the nutrients that they provide – is to “eat a rainbow”. To promote March’s healthy habit, this packet contains:

“Eat a Rainbow” Activities and Resources	Time needed:	Page Number:
Fruits and Veggies Basics		2
Curricular Connections: Fruits and Vegetables of all Colors	15-20 Min.	3-4
Curricular Connection: Garden Shapes	15-20 Min.	4-5

Additionally, if you are interested in doing an *Eat a Rainbow* classroom challenge to encourage your students to eat a variety of fruits and vegetables, see the chart at the end of this packet which students can take home to complete with their families, and bring back to you at the end of the week. Then, you can total up and celebrate the amount of fruits and vegetables your class ate over the week! For other *Eat a Rainbow* lesson and activity ideas, see <http://www.chathamnc.org/index.aspx?page=1463>. To keep up to date on *Eat a Rainbow* activities throughout the community and get tips and recipes for eating your fruits and vegetables, keep an eye on our *Eat a Rainbow* Week blog at www.chathampublichealth.com/eat-a-rainbow.

If you are interested in having a Public Health Educator or Nutritionist from the Chatham County Public Health Department complement your instruction by presenting to your class about nutrition, please take a look at the offerings for your grade level at www.chathamnc.org/schoolhealth, or contact Ellie Morris, the School Health Liaison for the Chatham County Public Health Department at elizabeth.morris@chathamnc.org or 919-545-8443.

The key points to focus on this month are:

- **Eating a bunch of different colored fruits and vegetables will help you get the different nutrients your body needs!** To get all the health benefitting super powers that fruits and veggies have to offer, you need to *eat a rainbow* regularly.
- **Trying new colorful fruits and vegetables is a fun, tasty adventure!** You’ll never get tired of fruits and veggies if you eat all different kinds and all different colors and if you keep on trying new ones you’ve never tried.
- **Fill half your plate with fruits and vegetables at every meal!** The only way you can eat all the colors of the rainbow each day is if you eat at least one fruit or vegetable at every meal! Fruits and vegetables make great snacks too- try apples wedges, carrots sticks, grapes, or raisins.

Fruit and Vegetable Basics

Eat a rainbow every day to get all of health benefitting super powers (a.k.a nutrients) that different fruits and vegetables have to offer! See below for some of the nutritional benefits provided by a colorful diet. For more information, see http://www.fruitsandveggiesmorematters.org/?page_id=53.

- The red group** – Many red fruits and vegetables are great sources of Vitamin C which helps keep the gums stay healthy and helps the skin heal from cuts and scrapes. Red fruits and vegetables that contain 20% of the recommended daily value of Vitamin C per serving include: red bell peppers, raspberries, watermelon, tomato, guava, grapefruit (pink!), and strawberries. Red fruit and vegetables also contain lycopene and anthocyanins. Research is being done to determine if these phytochemicals have a role to play in cancer prevention and treatment. (http://www.mayoclinic.com/health/lycopene/NS_patient-lycopene, <http://en.wikipedia.org/wiki/Anthocyanin>, http://www.fruitsandveggiesmorematters.org/?page_id=53)
- The orange/yellow group** – Many orange and yellow fruits and vegetables provide the body with Vitamin A which helps keep the eyes and skin healthy and helps protect the body from infections. Even though oranges are orange in color, they actually don't provide Vitamin A (but they do provide a lot of vitamin C!). Crunchy orange vegetables like carrots and sweet potatoes are packed with Vitamin A. They contain 20% of the recommended daily value per serving, along with fruits like cantaloupe, apricot, mango, and grapefruit. (http://www.fruitsandveggiesmorematters.org/?page_id=53)
- The green group** – Dark green vegetables like collard greens and spinach contain calcium for strong bones. And as we know from Popeye, spinach also contains iron to feed the blood and keep us feeling energized and strong. Many green vegetables also contain high levels of folate, which may reduce a woman's risk of having a baby with certain birth defects and may reduce the risk of certain cardiovascular diseases. For folate, eat broccoli, collard greens, spinach, lima beans, brussels sprouts, lettuce and artichokes. (http://www.fruitsandveggiesmorematters.org/?page_id=53, <http://www.extension.iastate.edu/Publications/N3401.pdf>)
- The blue/purple group** – Similar to red fruits and vegetables, purple fruits and vegetables also contain anthocyanins which may have a role to play in preventing and treating cancer. Additionally, blueberries may increase memory function in older adults. Although less of the common fruits and vegetables that we eat are blue and purple (compared to other color groups), increasingly you can find purple varieties of vegetables like string beans, broccoli, and carrots at farmers markets. (<http://www.webmd.com/alzheimers/news/20100121/blueberry-juice-may-boost-memory>)

How many servings of fruits and vegetables should I eat every day?

The USDA Nutrition Guidelines recommends eating the following amounts of fruits and vegetables each day. Amounts vary based on age, sex, and activity level. (<http://www.choosemyplate.gov>)

	Kids 4-8 years	Girls (9-13) Boys (9-13)	Teen Girls (14-18) Teen Boys (14-18)	Women (19-50) Men (19-50)	Women (51+) Men (51+)
Fruits	1-1.5 cups	1.5 cups (girls) 1.5 cups (boys)	1.5 cups (girls) 2 cups (boys)	1.5-2 cups (women) 2 cups (men)	1.5 cups (women) 2 cups (men)
Vegetables	1.5 cups	2 cups (girls) 2.5 cups (boys)	2.5 (girls) 3 cups (boys)	2.5 cups (women) 3 cups (men)	2 cups (women) 2.5 cups (men)

For more information on how much to eat and how much counts as a cup, see:

For fruits - http://www.choosemyplate.gov/foodgroups/fruits_counts_table.html,

For vegetables - http://www.choosemyplate.gov/foodgroups/vegetables_counts_table.html

Curricular Connections	Fruits and Vegetables of All Colors
Standard Course of Study Objectives and Health Education Essential Standards	Kindergarten <ul style="list-style-type: none"> • 4.02, 4.05 • K.NPA.1.1, K.NPA.1.3 1st grade: <ul style="list-style-type: none"> • 4.03 • 1.NPA.1.2 2nd grade: <ul style="list-style-type: none"> • 4.01
Time Needed	15-20 minutes
Organization/ Equipment	Organization <ul style="list-style-type: none"> • The first part of the activity will be completed with students in a large group. For the second part, students will be in small groups. Equipment <ul style="list-style-type: none"> • Large flip chart paper for the group brainstorm (or use your whiteboard) • At least 2 smaller sheets of paper for each small group • Writing utensils for each small group
Teacher Introduction	In this activity, students will practice large group brainstorming, list-sorting, and language arts skills by writing an acrostic poem about a favorite fruit or vegetable.
Rules and Directions	<ul style="list-style-type: none"> • Ask your students to think of some fruits and vegetables they know. Then, have a few students share out loud. • Ask if anyone remembers what we mean when we talk about “eating a rainbow”. If so, have him/her explain to the group. If not, explain that it’s a way to talk about eating a bunch of different colors of fruits and vegetables. Explain that it’s good to eat a rainbow every day to benefit from all the different healthy things found in each of the colors. • List the color groups for fruits and vegetables on the flip chart paper or board - red, orange & yellow, green, blue & purple - and review the health benefits of each of the color groups found on your <i>Fruit and Vegetable Basics</i> sheet or other <i>Eat a Rainbow</i> materials. • Tell the students that you’d like to create a long list of fruits and vegetables of all colors to use in an activity they will do later. Write students’ fruit/vegetable examples on the flip chart paper or board. You may also interject names of less common fruits or vegetables here and say a bit about them to expand the breadth of students’ learning in this activity. • Once the list is a good length (at least 25 items and containing examples from each color group), divide the students into small groups and assign each group a different color. There should be at least 4 small groups– one group looking at green fruits/vegetables, one for red, one for orange/yellow, and one for blue/purple. • Provide each small group with a couple pieces of paper and a writing utensil. Ask students to choose a writer and a speaker for their groups. • Explain to the groups that they will need to think about their groups’ color, look at the big list, and pick out all of the fruits and vegetables that fit into their assigned color group. They will write these on one of their sheets of paper. Go through a few examples. • After they have completed their lists, explain that they will need to choose, as a group, one fruit or vegetable on the list that every person in the group likes. Once they choose their fruit or vegetable, they will write an acrostic poem about it, using each letter of the fruit/vegetable’s name to begin each line. These poems can be comprised of simply one word on each line or contain a sentence on each line and should describe the fruit or

	<p>vegetable, why they like it, and potentially, why it is healthy to eat. Students may decorate these poems if you have the time.</p> <ul style="list-style-type: none"> • Give the students about 10 minutes to do the small group work. • Once groups are finished, bring everyone back to the large group and ask each group to share their fruit or vegetable poem. • To wrap-up, use content from the poems to reiterate that there are many different delicious fruits and vegetables out there in so many different colors that eating a rainbow is tasty, fun, and easy! <p>Show off your students' awesome work by e-mailing your favorite acrostics to Ellie Morris, CCPHD School Health Liaison, by Nov. 9th (elizabeth.morris@chathamnc.org). She will post them on the Eat a Rainbow Week blog (www.chathampublichealth/eat-a-rainbow) and send your class a certificate recognizing their great work and participation in Eat a Rainbow Week.</p>
<i>Variations</i>	<ul style="list-style-type: none"> • You can do this whole activity in a large group, or students can do the second part of the activity (sorting and acrostic) individually. • Do a tasting or show photos of an unfamiliar fruit or vegetable and ask small groups to write an acrostic poem about this fruit/vegetable.

<i>Curricular Connections</i>	<i>Garden Shapes</i>
<i>Standard Course of Study Objectives and Health Education Essential Standards</i>	<p>Kindergarten</p> <ul style="list-style-type: none"> • 4.02, 4.05 • K.NPA.1.1 <p>1st grade:</p> <ul style="list-style-type: none"> • 4.02, 4.03 • 1.NPA.1.1, 2.1 <p>2nd grade:</p> <ul style="list-style-type: none"> • 4.01, 4.02 • 2.NPA.1.3
<i>Time Needed</i>	15-20 minutes
<i>Organization/ Equipment</i>	<p>Organization</p> <ul style="list-style-type: none"> • Students will work individually or in pairs to design their gardens <p>Equipment</p> <ul style="list-style-type: none"> • Paper, a pencil, and colored pencils, markers or crayons • For older students: a ruler
<i>Teacher Introduction</i>	In this activity, students will explore geometry by designing a garden of their favorite colorful fruits and vegetables.
<i>Rules and Directions</i>	<p>Ask students if they have ever gardened before and what they liked about it. Tell students that gardening is a great way to get exercise and to get healthy food at the same time. Handout pieces of paper to each individual or pair and explain that this piece of paper represents a rainbow garden that they are going to plant with all of their favorite colorful fruits and vegetables.</p> <p>Lead students through the following instructions, pausing after each and circulating the room to monitor progress and field questions. You can also model this exercise at the front of the room. Students should draw and/or write the name of the fruits and vegetables their planting with the appropriate color.</p>

- Draw a triangle in one corner of your garden, and plant your favorite fruit there.
- Draw a square in the middle of your garden, and plant your favorite vegetable there.

Remind students that they are trying to plant a rainbow garden, so for the next instructions they should think about all of the different colored fruits and vegetables they like.

- Draw 4 smaller triangles and plant 4 other fruits that you like, one in each.
- Draw 3 smaller squares and plant 3 other vegetables that you like, one in each.

Then ask students to determine how many different fruits they planted. Remind them that each triangle is a fruit, so they can count of up their triangles. Do the same for vegetables. Then, ask how many fruits and vegetables they planted all together. You can also ask them to count how many different green fruits and vegetables they each planted or go through other colors.

Discuss which of their favorite fruits and vegetables grow on trees. (Popular fruits and vegetables that grow on trees include apples, oranges, bananas, avocados, peaches, mangos, and papayas. Berries, grapes, melons, kiwis, pineapples, and most vegetables grow on the ground, on vines, or on bushes.)

From this discussion, ask students to identify how many of their shapes have trees in them?

For older students, ask them to partition the garden into halves or quarters to begin the activity. Students can measure to determine what is half. To build measurement skills, you can also ask students to draw shapes with certain measurements, for example, the 4 smaller squares should have 1-inch sides.

To wrap-up, have students think about what it would be like if they had a rainbow of fruits and vegetables growing outside and could pick from the garden whenever they wanted. Or, if your school has a garden, relate this lesson to that garden.