What's Growing On In Virginia?
Virginia Foundation for Agriculture in the Classroom
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About the Newsletter

What's Growing On In Virginia? is a semiannual publication for Virginia elementary and middle school teachers, published by Agriculture in the Classroom

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For additional information and activities, visit our website at **AgInTheClass.org** or call **804-290-1143**

What's Growing On In Virginia?

AGRICULTURE IN THE CLASSROOM

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THIS ISSUE

Virginia produce: Nutritious, delicious and seasonal

Virginia farmers grow everything from asparagus to watermelon, and all kinds of fruits and vegetables in between.

Fruits and vegetables can be found throughout the year for ongoing good health. Some produce has limited growing seasons. Asparagus is available from Virginia growers from mid-April through early June, while other products, like herbs, can be grown outdoors or in greenhouses year-round.

Fruits and vegetables are some of the healthiest known foods. Most are low in calories and are packed with essential vitamins and minerals. The U.S. Department of Agriculture's food guide recommends filling half of your plate with fruits and vegetables at each meal.

Of the main vegetables grown in Virginia, most are 100 calories or less per serving, with many having less than 50 calories. Most contain vitamins A and C and provide iron and dietary fiber.

Virginia fruits are equally as healthy, with most providing less than 100 calories per serving. They also provide vitamins A and C and loads of dietary fiber.

Virginia produce farmers grow and sell a wide variety of fruits and vegetables including cabbage, cucumbers, string beans, sweet corn, tomatoes, sweet potatoes, white potatoes, watermelon, apples and peaches. The state's farmers also produce a large quantity of grapes, but most are sold for wine.

(continued on the next page)

Apples are grown in the Shenandoah Valley through the Roanoke Valley, in Albemarle and Rappahannock counties and in the southwestern counties of Patrick and Carroll, with the majority grown in the Shenandoah Valley. Warm days, cool nights, consistent rainfall and rich soil in that region create ideal conditions for growing a wide variety of apples.

But not all picked apples are eaten whole. Like other fruits and vegetables, some apples are sold for processing. In fact, 70 percent of Virginia apples are made into products like applesauce, apple juice, apple butter, pre-packaged slices and cider. Likewise, some Virginia tomatoes are made into tomato sauce and salsa, and some of the state's cucumbers are sold wholesale for pickles.

Beans, sweet corn and tomatoes are grown primarily on the Eastern Shore, and the top-ranking counties for cabbage are Carroll and Patrick. Cucumbers are grown primarily in Halifax, Hanover and Westmoreland counties.

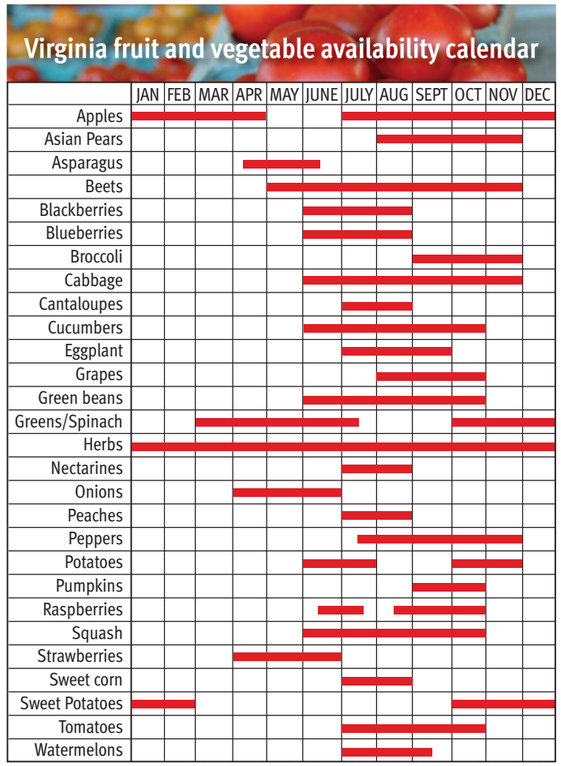
Virginia ranks high nationally for production of tomatoes, string beans, apples, potatoes, wine grapes, cucumbers and sweet potatoes.

Fruits and vegetables from the commonwealth also are exported to other countries, including Canada and Mexico.

Bonus Activity

Play Seasons Twister: On a shower curtain draw four rows of six circles to represent the seasons. Example: blue circles with snowflakes for winter; orange circles with leaves for fall; green circles with plants for spring; and red circles with suns for summer. Play by calling out clues for the seasons, such as "right hand on the season when we pick pumpkins." You can create a larger game by using multiple shower curtains.

Have your students write a "Day in the Life of..." paragraph: Have each student pick a produce item that is grown in Virginia, research it and write a paragraph detailing how that fruit or vegetable is grown and where it goes after harvest.



COURTESY OF VIRGINIA DEPARTMENT OF AGRICULTURE AND CONSUMER SERVICES

LESSON PLAN >> PRESCHOOL

CONTENT AREAS:
Vocabulary
Manipulative Movement

Objective:
to identify fruits and vegetables.

Materials:
- copies of basket page
- pictures of fruits and vegetables, and of non-edible objects
- scissors
- glue
- crayons

Download the full lesson at AgInTheClass.org

Fill a Healthy Basket

Background Knowledge

Virginia farmers grow many different types of fruits and vegetables. Commercial growers produce cabbage, cucumbers, string beans, sweet corn, tomatoes, sweet potatoes, white potatoes, watermelon, apples, peaches and wine grapes. Additional fruits and vegetables are grown locally as well. The commonwealth ranks high nationally for production of tomatoes, string beans, apples, potatoes, grapes, cucumbers and sweet potatoes.

Fruits and vegetables are important parts of a healthy and balanced diet. Preschoolers need between 1 and 2 cups of vegetables each day and 1 to 1½ cups of fruit daily.

Procedure

1. Talk to children about the health benefits of eating fruits and vegetables. Display real or artificial produce, or show pictures from a book and identify the various pieces.
2. Provide students with the basket page to color and decorate. Next, provide them with pictures (depending on the age of your students, you may pre-cut the items or have the students cut them out) of different pieces of produce as well as non-edible items such as a plate, table or shirt.
3. Have students sort the pictures into two piles: "things we eat" and "things we don't eat." Identify each of the fruits and vegetables in the "things we eat" pile.
4. Glue the pictures of "things we eat" onto the basket.

Extension

Place real or artificial pieces of fruit or vegetables around the classroom. Give each student a paper bag to decorate as their basket. Then let them go on a "Healthy Foods Scavenger Hunt" to fill their bags.

Bring in samples of the fruits and vegetables for children to taste.

Modification

Instead of sorting edible/non-edible items, older students can sort healthy foods from unhealthy foods.

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LESSON PLAN >> ELEMENTARY SCHOOL

Produce Graphing

SOL:
Math: 3.17, 4.14, 5.15
Health: 3.1, 4.1, 5.2

Objective:
to create a bar graph to compare the nutritional content of produce.

Materials:
- graph paper
- nutrition labels (for fruit and vegetable labels, visit **fruitsandveggiesmorematters.org/fruit-vegetable-nutrition-database**

Download the full lesson at AgInTheClass.org

Background Knowledge

Fresh fruits and vegetables are an important part of a healthy diet. Virginia farmers grow a wide variety of produce. Many of the state's fruits and veggies are sold fresh at farmers' markets and supermarkets. Others are sold to companies for packaging and/or processing. Others are grown and sold at "pick-your-own" operations.

Food labels help consumers know the nutritional value of the foods that they eat. Labels list the amount of calories, fat, cholesterol, sodium, carbohydrates, protein and fiber in food items. Additionally, they let the consumer know the percentage of their daily values of vitamins A and C, as well as of calcium and iron, that they will receive from the food. For example, if a label says "Vitamin C 20%" it means that eating the food will provide 20 percent of the consumer's daily recommended amount of Vitamin C.

Labels allow the consumer to choose foods high in vitamins, minerals and fiber and low in fat, cholesterol and sodium. Fruits and vegetables are an excellent source of vitamins, minerals and fiber. This lesson will help students discover the nutritional benefits of these items.

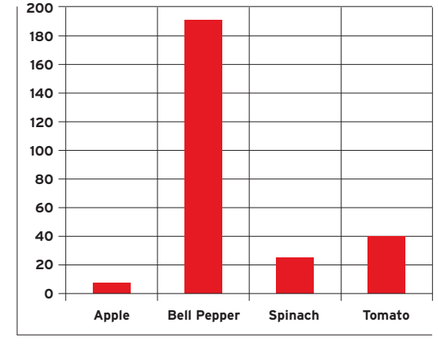
Procedure

1. Hand out the nutrition labels to students, and discuss how to read the labels, as well as what the various terms mean. Discuss the health benefits of vitamins and minerals.
2. Have students draw an X and Y axis on their graph paper. Label the X axis with the different types of produce. Choose which nutritional value you would like to graph (such as fiber, Vitamin A, Vitamin C or iron), and label the Y axis with either the percentage or grams of that value.
3. Students should then use their nutrition labels to complete the bar graphs.
4. Repeat with the other values on the food labels.
5. Have students write a short paragraph summarizing the results of their graphs.

Extension

Bring in less-healthy items such as candy bars or snack cakes. Compare and contrast their labels with those of the fresh foods. Discuss the importance of healthy food choices.

–Lesson adapted from **California Agriculture in the Classroom**



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Apple

Nutrition Facts

Serving Size 1 large apple (242g)

Amount Per Serving	
Calories 130	Calories from Fat 0
	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 34g	11%
Dietary Fiber 5g	20%
Sugars 25g	
Protein 1g	

Vitamin A 2%	Vitamin C 8%
Calcium 2%	Iron 2%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less Than	65g	80g
Saturated Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 Carbohydrate 4 Protein 4

Bell Pepper

Nutrition Facts

Serving Size 1 medium pepper (148g)

Amount Per Serving	
Calories 25	Calories from Fat 0
	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 40mg	2%
Total Carbohydrate 6g	2%
Dietary Fiber 2g	8%
Sugars 4g	
Protein 1g	

Vitamin A 4%	Vitamin C 190%
Calcium 2%	Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less Than	65g	80g
Saturated Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 Carbohydrate 4 Protein 4

Spinach

Nutrition Facts

Serving Size 1½ cups shredded (86g)

Amount Per Serving	
Calories 40	Calories from Fat 0
	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 160mg	7%
Total Carbohydrate 10g	3%
Dietary Fiber 5g	20%
Sugars 0g	
Protein 2g	

Vitamin A 70%	Vitamin C 25%
Calcium 6%	Iron 20%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less Than	65g	80g
Saturated Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 Carbohydrate 4 Protein 4

Tomatoes

Nutrition Facts

Serving Size 1 medium tomato (148g)

Amount Per Serving	
Calories 25	Calories from Fat 0
	% Daily Value*
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	0%
Cholesterol 0mg	0%
Sodium 20mg	1%
Total Carbohydrate 5g	2%
Dietary Fiber 1g	4%
Sugars 3g	
Protein 1g	

Vitamin A 20%	Vitamin C 40%
Calcium 2%	Iron 4%

* Percent Daily Values are based on a 2,000 calorie diet. Your daily values may be higher or lower depending on your calorie needs:

	Calories	2,000	2,500
Total Fat	Less Than	65g	80g
Saturated Fat	Less Than	20g	25g
Cholesterol	Less Than	300mg	300mg
Sodium	Less Than	2,400mg	2,400mg
Total Carbohydrate		300g	375g
Dietary Fiber		25g	30g

Calories per gram:
Fat 9 Carbohydrate 4 Protein 4

Source: **http://www.fruitsandveggiesmorematters.org/**

LITERARY CORNER

Books emphasize farm-grown fruits and vegetables

A Year at a Farm, Nicholas Harris, Millbrook Press
ISBN: 9781580137980

Fruits, Nancy Dickmann, Heinemann-Raintree
ISBN: 9781432969806

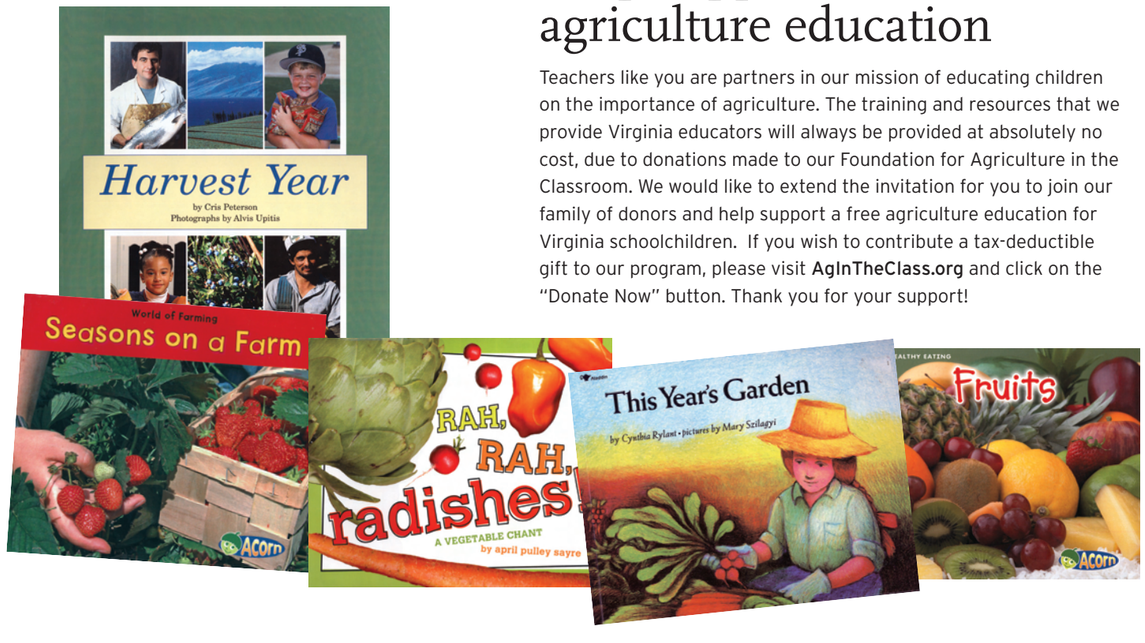
Harvest Year, Cris Peterson, Boyds Mills
ISBN: 9781590787830

Rah, Rah Radishes! A Vegetable Chant,
April Pulley Sayre, Beach Lane Books
ISBN: 9781442421417

Seasons on a Farm, Nancy Dickmann, Heinemann-Raintree, ISBN: 9781432939533

The Year at Maple Hill Farm, Alice and Martin Provensen, Aladdin, ISBN: 9780689845000

This Year's Garden, Cynthia Rylant, Atheneum Books for Young Readers, ISBN: 9780689711220



AITC Program Highlights

Agriculture in the Classroom wants your feedback

If you have used AITC in your classroom, please take a three-question mini survey at **surveymonkey.com/s/AITCFeedback**. Participants will be entered in a drawing to win an AITC book bundle.

Summer workshops coming up

Be on the lookout for information about upcoming summer workshops. Dates, locations and registration can be found at **AgInTheClass.org**.

Celebrate Agriculture Literacy Week by reading an ag-themed book

AITC is celebrating agriculture by working with volunteers to read **Kelly's Big Day** to students across the state. Celebrate in your own classroom by reading this book or another one about agriculture. Find a comprehensive list on the AITC website.

Help support free agriculture education

Teachers like you are partners in our mission of educating children on the importance of agriculture. The training and resources that we provide Virginia educators will always be provided at absolutely no cost, due to donations made to our Foundation for Agriculture in the Classroom. We would like to extend the invitation for you to join our family of donors and help support a free agriculture education for Virginia schoolchildren. If you wish to contribute a tax-deductible gift to our program, please visit **AgInTheClass.org** and click on the "Donate Now" button. Thank you for your support!