



# March: 9-12

## Food Environment

**CABAGGE**



# Farm to School Lessons

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## Overview

Welcome to the South Carolina Farm to School March Nutrition Education Lesson. This lesson contains information & hands on activities where 9-12 students will be learning about food environments and their influence on food choices and purchases. Our goal for this lesson is to help students explore the connection between food environments and making healthier choices.

In order to achieve this goal, the students will review typical food environments and study how companies use food ads to influence our decisions. Students will have the opportunity to see how creating an ad can influence a person's decision to purchase a food item.

**These lessons are designed to be delivered over a four week period, noting that introduction & activities will be supplemental to existing curriculum.**

**Estimated Total time: 90-135 minutes**

## Teacher Background<sup>1</sup>

Each year, food companies in the United States spend billions of dollars promoting their products. They use a variety of advertising and marketing techniques to influence our food choices, encouraging us to switch brands or to simply buy and eat more.

The majority of food advertising is for highly processed foods, including fast foods, convenience foods, candy, sweetened cereals, snack foods, and soft drinks. With the heavy promotion of these products and with the added fat, sugar, and salt they contain, Americans eat about 25 percent more calories today than they did in 1980.

Food companies use aggressive and sophisticated marketing techniques to influence our food choices. More and more, these techniques are being aimed at children, who receive a constant barrage of food advertising through television, magazines, websites, clothing, and even school.

According to a report by the Center for Science in the Public Interest, one of the most important factors in rising childhood obesity and poor diets is food marketing. As it states, "While they are not intentionally trying to undermine children's health, there is no disputing that the goal of food marketing aimed at children is to influence their food choices."

Today's students must navigate a world filled with advertising and consumer marketing. By learning to examine this profusion of messages with a critical eye, they will be better able to make healthful and responsible food choices.

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<sup>1</sup> Adapted from Nourishlife *Analyzing Food Ads* ([http://www.nourishlife.org/pdf/Nourish\\_Curriculum\\_Guide.pdf](http://www.nourishlife.org/pdf/Nourish_Curriculum_Guide.pdf))

# Lesson checklist



**F2S Aim:** Explore the food environment to eat “Whole-Real Foods”, “Mostly SC Food Plants” and “Not too Much”.

**F2S Objectives**

*Students will be able to:*

- \* Explain the term “Food Environment”.
- \* Identify factors that affect the “Food Environment” (Advertisements and Availability)
- \* Discuss the types of places that play a role in developing the Food Environment (Farmer’s Markets, Fast Food Chains, Local Vegetable stand and School Cafeterias).
- \* Taste the Palmetto Pick of the Month (cabbage).



**Materials:**

- \* Analyzing Food Ads (Appendix A)
- \* Examples of products (Appendix B)
- \* Spring Planting Information (Appendix C)
- \* Cabbage Power Point (Appendix D)
- \* Gardening Journal
- \* PPM Materials: Cabbages, sample cups, cutting board, knife, markers



**National Health Education Standards**

1.12.2	1.12.3	1.12.7	2.12.2	2.12.5
2.12.6	2.12.8	2.12.10	3.12.1	3.12.2
3.12.3	3.12.5	4.12.1	5.12.1	5.12.2
5.12.4	5.12.6	7.12.1	7.12.2	8.12.1
8.12.2	8.12.3	8.12.4		

## SC State Standards

E2-2.2	Compare/contrast information within and across texts to draw conclusions and make inferences.
E2-2.4	Create responses to informational texts through a variety of methods (for example, drawings, written works, oral and auditory presentations, discussions, and media productions).
E2-2.7	Analyze propaganda techniques in informational texts.
E2-4.1	Organize written works using prewriting techniques, discussions, graphic organizers, models, and outlines.
E2-4.2	Use complete sentences in a variety of types (including simple, compound, complex, and compound-complex).
E2-4.4	Use grammatical conventions of written Standard American English, including <ul style="list-style-type: none"> <li>• subject-verb agreement,</li> <li>• pronoun-antecedent agreement,</li> <li>• agreement of nouns and their modifiers,</li> <li>• verb formation,</li> <li>• pronoun case,</li> <li>• formation of comparative and superlative adjectives and adverbs, and</li> <li>• idiomatic usage.</li> </ul>
E2-4.5	Revise writing to improve clarity, tone, voice, content, and the development of ideas.
E2-4.6	Edit written pieces for the correct use of Standard American English, including the reinforcement of conventions previously taught.
E2-5.5	Create technical pieces (for example, proposals, instructions, and process documentation) that use clear and precise language suitable for the purpose and <b>audience</b> .
E2-6.2	Use direct quotations, paraphrasing, or summaries to incorporate into written, oral, auditory, or visual works the information gathered from a variety of research sources.
E2-6.3	Use a standardized system of documentation (including a list of sources with full publication information and the use of in-text citations) to properly credit the work of others.
E2-6.4	Use vocabulary (including Standard American English) that is appropriate for the particular audience or purpose.
E2-6.5	Create written works, oral and auditory presentations, and visual presentations that are designed for a specific audience and purpose.
E2-6.6	Select appropriate graphics, in print or electronic form, to support written works, oral presentations, and visual presentations.

## Lesson Essential Components

Lessons profile	Page(s)	Yes	No	Notes
Palmetto Pick of the Month	8	★		Tasting activities with cabbage
Health Education Standards	4	★		
SC-Cross Curricular Standards	5	★		
SC-F2S Behavioral Goals	4	★		
Cooking Activities	8	★		
Tasting Activities	8	★		
Physical Activity	7-8	★		
Food Safety	8	★		
School Food Garden	8	★		
Student to Farmer Connections (i.e. field trips, talks)			★	
Student to Chef Connections			★	
Farm to Cafeteria			★	
Provision of scientific knowledge/rationale			★	
Risk and benefits about healthy behaviors	7	★		
Obstacles, Barriers & Solution	7	★		
Family involvement and other supports		★		Family Activity Letter
Set goals and monitoring progress			★	
Other hands on activities:	7	★		Team Activities



## Let's Learn!

### What is a Food Environment?<sup>1</sup>

**Estimated Time: 10 minutes**

1. Ask students what they consider their food environment to be. Write a few answers on the board (examples: grocery store, convenience stores, restaurants, farmer's markets).
2. Have students watch Michael Pollan's video on supermarkets: <http://www.youtube.com/watch?v=snP40-unO0A>.
3. After the video, ask students to think about how food environments advertise to them.

## Activity

### What are you selling me?

**Estimated Time: 50-80 minutes**

1. Create groups of four in the class. Give each group the **Analyzing Food Ads** worksheet (Appendix A). Have each group choose an ad for a product and complete the sheet.
2. Split the groups into two categories (A and B). Each group will use the worksheet as a base to create an ad. Give each group their product. Category A will create an ad for a processed food. Category B will create an ad for a whole food. See Appendix B for examples of products for each category. Do not share the foods with other groups. Each group should work quietly together in order to debut their ad to the class and try to sell their product. The ad should include:
  - a marketable plan to sell the product
  - the value of the product (note: this can include price, nutrition, convenience, etc)
  - the location of the product (i.e. where can it be purchased)
3. Once the ad is complete, each group should present their ad to the class. After each presentation, discuss as a class:
  - How does the ad for the product influence their decision to purchase the product?
  - How does the food environment influence their decision to purchase the product?

- Does the influence change depending on the product? For example, how does the influence change when it is a processed versus whole food?
- How does the ad change when it is a processed or whole food? For example, what values are promoted for each type of food? Is there a difference in values promoted for each category? If so, what does this tell us?

*Note:* This activity is designed to be completed during a four week period. Introduce the topic and allow the groups time to work on their ads each week. The ads can be electronic or can be paper (poster, construction, etc). Encourage the students to be creative when designing their ad.

*Expand the activity:*

- To expand this activity, after discussion on food environments, have students keep a journal over a two-four week period describing their perceptions of food environments in their daily food choices.

## ★ Gardening Activity

### Planting the Spring Garden

**Estimated Time: 15-30 mins**

#### Materials Needed:

#### Farm to School Planting Video

*Note:* This activity is designed to help the school plant for Spring in their Farm to School raised beds/in-ground gardens. Because schools are implementing lessons at different levels, please consult with the Farm to School Team at your school about the direction the school would like to take for planting the garden before doing this activity.

1. Review with the class the purpose of the school garden.
2. Explain the purpose of this activity is to plant the school garden. Take a few minutes to watch the **Farm to School Planting Video** (in Dropbox).
3. Next, make arrangements to spend time at the school garden to transplant seedlings or plant seeds.

4. When you return to the classroom, encourage students to journal about the experience. Continue to encourage students to journal throughout the planting/tending/harvesting process. Groups can journal about how each of these affect the garden: weather, sun, water/rain, etc.

### ★ Palmetto Pick Activity

#### Cabbage Sensory Exploration<sup>2</sup>

Estimated Time: 15 mins

##### Ingredients:

Green, red (or purple), savoy and Chinese cabbage varieties.

Two heads of each variety.

Small sample cups (four cups per group of four students)

White board and markers

Cutting board and knife

Cabbage Power Point Presentation (will be in Dropbox).

For adding cabbage teaching points: [http://www.tcoe.org/NFAHC/HOTM/2011\\_03/TeachingPoints\\_K2.pdf](http://www.tcoe.org/NFAHC/HOTM/2011_03/TeachingPoints_K2.pdf)

##### Sensory Exploration Activity:

1. Have students wash their hands (with soap & warm water for 20 seconds) & reinforce that it is important. Show the students that you have washed the cabbages before beginning.
2. Display the **Cabbage** power point (will be in Dropbox-Appendix G) to show the varieties of cabbages.
3. Chop and fill sample cups, keeping varieties separate; label cups as set aside.
4. Divide students into groups of four.
5. Distribute sample cups to groups, one variety at a time.
6. Observe tastes, colors and textures, record observations on the board.
7. Vote on class favorite.

*Note:* You may want to have cabbage samples cut before you begin the PPM Activity. Remember, that

you can use the Farm to School grant funds to purchase the materials required for this activity; or if you prefer not to purchase cabbage you may only use the power point that will be sent in Dropbox with this lesson. Additionally, if you need assistance identifying places to purchase SC cabbages, feel free to contact your Farm to School Agriculture regional coordinator.

### 📝 Evaluation

##### Formal Assessment:

1. Review Food Environments & discuss the ways food ads affect our buying choices.

**Informal Assessment:** Observe participation in lesson activities. Complete survey at end of month (survey will be sent electronically).

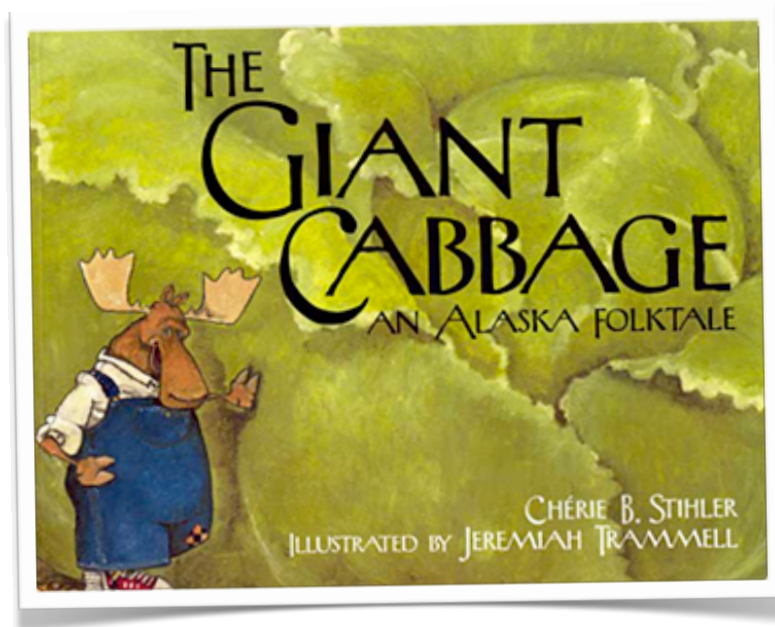
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<sup>2</sup> Activity adapted from Cabbage Teaching Points, Grades K-2, March 201, Harvest of the Month, California Department of Public Health.



# Resources



## Books:

Koch P.A., Barton A.C., Contento I.R. (2008). Farm to Table & Beyond. Teachers Columbia University & the National Gardening Association, New York, NY.

## Websites:

Harvest of the Month-Cabbage Teaching Points: [http://www.tcoe.org/NFAHC/HOTM/2011\\_03/TeachingPoints\\_K2.pdf](http://www.tcoe.org/NFAHC/HOTM/2011_03/TeachingPoints_K2.pdf)

To request nutrition education materials visit the Clemson University Nutrition and Resource Center (NIRC): [www.clemson.edu/nirc](http://www.clemson.edu/nirc)

Start a school salad bar-Part of First Lady Michelle Obama's Let's Move: <http://saladbars2schools.org/>

ACTIVITY FIVE

# ANALYZING FOOD ADS

Name \_\_\_\_\_

Date \_\_\_\_\_

Food ads use a variety of techniques to encourage us to buy and eat more. Choose an ad to analyze, and then answer the following questions.

1. What product is the ad selling?
2. What is pictured in the ad?
3. What does the ad highlight? (Circle all that apply.)  

Quality	Taste	Price	Health	Environment	Other: _____
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4. Who is the target audience? (Circle all that apply.)  

Kids	Teens	Adults	Parents	Other: _____
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5. What marketing techniques does the ad use?
6. How does the ad encourage people to buy or eat more of the product?
7. What else is the ad selling besides the product?
8. How effective is the ad?

## ACTIVITY FIVE

# FOOD MARKETING TECHNIQUES

Food companies are in the business of selling food. They use many different techniques to encourage people to buy and eat more of their products.

### ADVERTISING

#### ADS EVERYWHERE

Ads are put in many places—magazines, websites, buses, billboards, movies, displays, packaging, and clothing—to constantly remind us about the food product.

#### LOOKING GOOD

The food in ads often looks better than real life. Extreme close-ups trigger our senses of taste and smell, making us crave that food.

#### CELEBRITIES

Ads with celebrities put a familiar face on the product. For kids, the “celebrity” may be a cartoon, movie, or TV character.

#### HEALTH CLAIMS

Many ads claim or imply that the product is good for you. While they may convince you to buy, these claims are often unclear or inaccurate.

#### CLAIMS ABOUT TASTE OR POPULARITY

Many ads describe the food’s deliciousness or popularity to sell the product. These claims are often exaggerated or unsupported.

#### OVERDOING IT

Ads may show big portion sizes or people who can’t stop eating the product, both of which encourage you to eat a lot.

## OTHER APPROACHES

In addition to advertising, companies use many less obvious approaches to get you to buy more:

### COUPONS

With money-saving coupons, companies entice people to buy their brand over another.

### MOVIES AND TV

Companies pay a lot of money to have their products prominently placed in movies and TV shows, which helps create an emotional connection.

### CONTESTS, GAMES, OR GEAR GIVEAWAYS

Contests, games, and giveaways encourage people to buy food products for reasons other than the food.

### DONATIONS

Companies donate money or equipment to schools and charities for each box top or label you collect, which encourages you to buy more and creates brand loyalty.

### MANY POINTS OF SALE

Companies sell food everywhere they can—gas stations, malls, sporting events, theaters, schools—because we eat more when food is handy.

### SHELF POSITION

Companies pay expensive fees to grocery stores to place their products on the most visible shelves—like candy at children's height—so we are more likely to buy them.

## Appendix B

### Examples of Foods for Ads:

#### Processed

Apple Sauce

Pop Tarts

Chips

Spaghetti Sauce

Soda

Candy

Popular boxed meals such as Hamburger Helper, Pasta Roni, etc.

Frozen entrees

#### Whole Foods

Apples

Oranges

Bananas

Broccoli

Peppers

Carrots

Mushrooms

Grapes

Strawberries

Potatoes

Tomatoes

Peanuts

## Appendix C

# Important Spring Gardening Recommendations

### General Gardening Questions

<http://www.clemson.edu/extension/hgic/plants/vegetables/gardening/>

### Important Gardening Dates Suggestions

<http://www.clemson.edu/extension/hgic/plants/vegetables/gardening/hgic1256.html>

<b>Plants</b>	<b>Harvest Days</b>	<b>Dates to plant</b>
Radish	25-30	1/1-3/1 *
Onion greens sets/plants	35-45	2/1-3/1
Mustards	40-60	1/1-2/25 *
Lettuce head	30-50	12/20-2/5
Lettuce leaf	40-70	12/20-2/5 *
Collards	60-70	2/20-3/15 *
Carrots	60-80	12/15-1/30
Cabbage	60-80	12/1-1/15
Broccoli	60-70	2/15-3/1 *
Beets	50-60	12/15-1/30 *
Beans snap-garden	50-70	1/10-1/20
Beans edible soy	60-70	3/15-3/30
Turnips	60-70	1/1-3/1 *
Spinach	50-60	1/1-2/25 *
Irish potatoes (next year)	90-110	4/15-7/1
Sweet potatoes (next year)	120	2/1-2/15
Peppers(large transplants)	60-70	3/15-4/10 **
Tomatoes(large transplants)	70-80	3/25-4/10 **

Keep in mind there are approximately 150 days from 1/1/2012 - 5/31/2012

If you would like your students to harvest a few of their crops before the end of school they need to start planting before Mid February.

\* Farm to School's favorite top 8 for quick and easy results!

\*\* Start from seed in January, plant transplants mid March or after the last frost, to harvest by May 30, 2012(hopefully).

Feel free to contact your local extension employees for help with the garden or your Regional Farm to School Coordinator.



