

# Lesson 8

Uncover Tasty Crimes



## Lesson Summary



### Overview

The garden detectives solve three tasty crimes involving dark-green vegetables. As they investigate these crimes, the detectives share their Public Service Announcements (PSAs) for leaf lettuces, spinach, and Swiss chard (from Lesson 3); review important gardening and nutrition facts about leaf lettuces, spinach, and Swiss chard; and prepare recipes and taste dishes featuring leaf lettuce, spinach, and Swiss chard. You may also want to include beet greens in this lesson (beets are a focus in Lesson 9); beet greens count as a dark-green veggie, too.



### Lesson Extensions

In the lesson extension, students create an acrostic poem using the letters in leaf lettuce, spinach, or Swiss chard.



### Key Message

**Be a great garden detective!** Discover what foods taste great with dark-green veggies.



### Garden Connection

The garden detectives take a photograph (or create a drawing to scale) of their assigned fruit or vegetable in the garden each week and post it on the bulletin board. As they do so, they report to the rest of the class on how their plants are growing.

Have the student groups assigned to leaf lettuce, spinach, and Swiss chard show the other students in the class their plants in the garden and have them share information about their plants' growth and care-taking needs using the *Be a Garden Detective!* bulletin board.



### School Food Service Connection

Collaborate with school food service to include and promote leaf lettuces, Swiss chard, and spinach in the school menu. Ask them to display the posters about these vegetables that students created in Lesson 3.

Ask school food service to help you obtain and prepare the ingredients for the leaf lettuce, spinach, and Swiss chard dishes for this lesson. Request that the school food service demonstrate how to prepare each recipe for the class.



### Cookbook Connection

Recipes to prepare the leaf lettuce, spinach, and Swiss chard dishes from this lesson should be included in the class cookbook. Poems created in the lesson extension should also be included.



### School Connection

Invite the school principal and others from the school community to visit the classroom to taste the prepared dishes.

Have students share their PSAs with the entire school during morning announcements or post a video of them performing their PSAs on the school's Web site.



### Home Connection

Ask for parent volunteers to help with the food preparation activities in this lesson. Send the *Garden Detective News* home to parents/caregivers; it includes the recipes that students prepared in class and suggests that families try a new fruit or vegetable each day for a week. Encourage students to complete this family activity with their parents or caregivers.



### Community Connection

Ask a farmer or local grocery store manager to donate the ingredients for the food preparation.

Invite a local chef in to help prepare the leaf lettuce, spinach, and Swiss chard dishes or to prepare a recipe of his or her own for these dark-green vegetables.



### Media Connection

Take pictures of the students preparing the dishes and submit to your local newspaper with a press release and recipes.

## Main Lesson: Uncover Tasty Crimes

### Standards Addressed

#### Science

Standard F, Science in Personal and Social Perspectives (Personal Health/Nutrition): *Develop an understanding of how various foods contribute to health.*

#### English/Language Arts

Standard 3, Reading Informational Text: *Describe the relationship between a series of steps in technical procedures in a text, using language that pertains to time, sequence, and cause/effect.*

Standard 2, Speaking and Listening: *Determine the main ideas and supporting details of a text read aloud or information presented in diverse media and formats, including visually, quantitatively, and orally.*

Standard 4, Speaking and Listening: *Report on a topic or text, tell a story, or recount an experience with appropriate facts and relevant, descriptive details, speaking clearly at an understandable pace.*

#### Mathematics

Standard 2, Measurement and Data: *Measure and estimate liquid volumes and masses of objects using standard units.*

#### Health

Standard 1, Concepts: *Comprehend concepts related to health promotion and disease prevention to enhance health.*

Standard 7, Practice Health-Enhancing Behaviors: *Practice health-enhancing behaviors and avoid or reduce health risks.*

### Learning Objectives

Students will be able to:

1. Read and follow procedures in a recipe featuring dark-green vegetables.
2. Use standard units of measurement to prepare a recipe.
3. Describe how to prepare a recipe featuring dark-green vegetables.

**Note to Teachers:** Swiss chard, spinach, and beet greens are all related and can be used interchangeably in cooked recipes.

## Crime #1: The Case of the Scrambled Recipe

### Time Required

60 minutes

### Materials

- *Student Handout 1.1, Stay Healthy: Wash Your Hands!* (Lesson 1)
- *Student Handout 1.2, The Garden Detectives' Tasting Code* (Lesson 1)
- *Student Handout 8.1, It's a Tasty Crime—Chicken Caesar Salad Wraps*
- *Student Handout 8.2, The Case of the Scrambled Recipe*
- Apron, smock, or large T-shirt for each child (not the same one used for gardening)
- Disposable plastic food preparation gloves, one pair per child
- Ingredients for Chicken Caesar Salad Wrap
  - 5 boneless, skinless chicken breasts, cooked, and chopped up (4-5 cups of pre-cooked and chopped chicken)
  - 5 tomatoes, chopped
  - 5 tablespoons of fat-free Caesar salad dressing
  - 30 leaf lettuce leaves, separated
- 5 plastic knives for cutting tomatoes
- 5 large bowls
- Measuring spoons (1 tablespoon) for measuring salad dressing, one per student group
- 5 large spoons for mixing
- Paper plates, one per student, plus one extra per group to use as a serving platter
- Napkins or paper towels, one per student

### Preparation

- Request assistance (i.e., demonstration of how to prepare recipes) from school food service and/or parents for the food preparation portion of this lesson.
- Obtain ingredients for lettuce wraps.
- With school food service, prepare food ingredients by cleaning, cutting, and cooking as described in the recipe.
- Arrange for refrigerated storage for ingredients prior to preparation time.
- Duplicate one copy of *Student Handouts 8.1* and *8.2* on 3-hole-punch paper for each student.
- Duplicate one copy of *Student Handouts 1.1* and *1.2* on 3-hole-punch paper, if you have not previously done so.
- Arrange the classroom for five food preparation stations.
- Wash the surface of the desk or tables with hot, soapy water. Sanitize with a solution of 1 tablespoon of unscented liquid chlorine bleach per gallon of water.
- Brief volunteers on their roles during the food preparation activity.

## Instructional Process

### STEP 1

#### Review information about leaf lettuces.

Have the leaf lettuce garden detectives report on their plants' progress in the garden by reviewing the growth pattern on the *Be a Garden Detective!* bulletin board. Next, have them share the posters and PSAs they created in Lesson 3: *Investigate Like a Super Sleuth* with their classmates.



Discuss the following key information about leaf lettuces:

There are four main types of lettuce:

- **Crisphead or iceberg lettuce** is probably the most common and the least nutritious. Crisphead is characterized by a tight, firm head of crisp and light-green leaves. It is NOT a member of the Dark-Green Vegetable Subgroup because it is lower in nutrient content than the other dark-green leafy lettuces.
- **Butterhead lettuce** has smaller, softer heads of loosely folded leaves. The outer leaves may be green or brownish with cream or butter-colored inner leaves. An example of butterhead is Bibb lettuce.
- **Romaine or cos lettuce** forms upright, cylindrical heads of tightly folded leaves. The plants may reach up to 10 inches in height. The outer leaves are medium green with greenish white inner leaves. This lettuce has gained tremendous popularity in the past decade as the key ingredient in Caesar salads.

- **Leaf lettuce** has open growth and does not form a head (the leaves are attached at the stem). Leaf form (frilled, crinkled, deeply lobed) and color varies. Color ranges from light green to red and bronze. Examples of leaf lettuce include oak leaf and red leaf. Leaf lettuce is the featured lettuce in the class garden.

Butterhead, romaine, and leaf lettuce all fall into the Dark-Green Vegetable Subgroup because of their dark-green color and the nutrients they contain, such as vitamin A. Vitamin A helps keep our eyes and skin healthy and helps protect against infections.

Iceberg lettuce belongs to the “Other” Vegetable Subgroup due to its lower vitamin A content. So when you are choosing salads, be sure to add in some dark-green lettuces for added nutrition.

All lettuces are low in calories.

### STEP 2

#### Introduce the food preparation activity.

Tell students that today they are going to prepare and taste a simple lettuce wrap recipe. As garden detectives, they will discover what food tastes great with dark-green veggies.

Divide students into five small groups of 5-6 students. Have each group go to a food preparation station.



#### Ask students:

- **Who has eaten a salad wrap before?** (Ask students who have eaten a salad wrap what kind it was and how it tasted.)

Distribute *Student Handout 8.1, It's a Tasty Crime—Chicken Caesar Salad Wraps*.

Have students read the recipe silently to themselves.

**STEP 3**

**Have students complete the food preparation activity.** Before beginning food preparation, ask students to retrieve *Student Handout 1.1, Stay Healthy: Wash Your Hands!* (Lesson 1) from their *Garden Detective Journals* and review its key points. Then have all students wash and dry their hands according to the guidelines on the handout.

Have children put on plastic gloves to ensure food safety and large T-shirts, smocks, or aprons to protect their clothes. Distribute to each group the following items:

- 1 plastic knife for chopping tomatoes
- 1 large bowl
- 1 tablespoon for measuring
- 1 large spoon for mixing
- 2 paper plates, one to hold the chopped tomatoes and the other to hold their prepared wraps
- Ingredients for recipe

Instruct all groups to follow the recipe on *Student Handout 8.1, It's a Tasty Crime—Chicken Caesar Salad Wraps* and prepare six servings of Chicken Caesar Salad Wraps. Make sure each member of each student group has a food preparation task to complete (e.g., chopping, measuring, mixing).

**STEP 4**

**Have students taste the lettuce wraps.**

First, review *Student Handout 1.2, The Garden Detectives' Tasting Code* from students' *Garden Detective Journals* (or project *Overhead/Slide 1.2* from Lesson 1) by reading the tasting guidelines aloud.

Distribute to each group a paper plate and napkin for each student. Have each student taste a lettuce wrap from the serving plate.



**Ask the students:**

- What did you think of the Chicken Caesar Salad Wrap?
- Were you surprised by the way it tasted?
- What are some other dishes you can prepare using leaf lettuces?

**STEP 5**

**Solve the Case of the Scrambled Recipe.**

Distribute *Student Handout 8.2, The Case of the Scrambled Recipe*. Explain to students that the computer has mysteriously scrambled the lettuce wrap recipe when you printed it. The preparation steps are all in the wrong order and there is an important ingredient that's missing. Their job is to find the missing ingredient and put the preparation steps in the correct order.

## Crime #2: The Case of the Recipe Thief

### Time Required

60 minutes

### Materials

- *Student Handout 1.1, Stay Healthy: Wash Your Hands!* (Lesson 1)
- *Student Handout 1.2, The Garden Detectives' Tasting Code* (Lesson 1)
- *Student Handout 8.3, It's a Tasty Crime—Spinach Strawberry Salad*
- Apron, smock, or large T-shirt for each child (not the same one used for gardening)
- Disposable plastic food preparation gloves, one pair per child
- Ingredients for Spinach Strawberry Salad
  - 10 cups washed raw spinach
  - 2 ½ cups sliced strawberries
  - 1 ¼ cups olive oil
  - 1 cup vinegar
  - 1 ¼ teaspoons salt
  - ¾ teaspoon pepper
- 5 plastic knives for cutting strawberries
- 5 large bowls
- 5 sealable jars for mixing salad dressing
- Measuring spoons (1 tablespoon) for measuring salad dressing, one per student group
- Measuring cups, one set per student group
- 5 large spoons for mixing
- Paper plates, one per student
- Napkins or paper towels, one per student
- Plastic forks, one per student

### Preparation

- Recruit volunteers (such as a cooperative extension agent, parent, school food service staff, or local chef) to help with the food preparation portion of this lesson.
- Obtain ingredients for Spinach Strawberry Salad.
- Arrange for refrigerated storage of ingredients prior to preparation time.
- Duplicate one copy of *Student Handout 8.3* on 3-hole-punch paper for each student.
- Duplicate one copy of *Student Handouts 1.1* and *1.2* on 3-hole-punch paper for each student, if you have not previously done so.
- Arrange the classroom for five food preparation stations.
- Wash the surface of the desk or tables with hot, soapy water. Sanitize with a solution of 1 tablespoon of unscented liquid chlorine bleach per gallon of water.
- Brief volunteers on their roles during the food preparation activity.

## Instructional Process

### STEP 1

**Review information about spinach.** Have the spinach garden detectives report on their plants' progress in the garden by reviewing the growth pattern on the *Be a Garden Detective!* bulletin board. Next, have them share the posters and PSAs they created in Lesson 3: *Investigate Like a Super Sleuth* with their classmates.

Review the following important facts about spinach:

- Spinach belongs to the Dark-Green Vegetable Subgroup and is an excellent source of vitamin A. Vitamin A helps keep our eyes and skin healthy and helps protect against infections.
- It also provides vitamin C, folate, potassium, and fiber. Vitamin C heals cuts and wounds and keeps our gums healthy. Folate helps the body make red blood cells. Potassium helps to maintain heart health, regulates body fluids, and is needed for muscle and nerve functioning.
- Spinach is a cool season plant, so it's grown in the spring and fall in most parts of the country.

### STEP 2

**Introduce the food preparation activity.** Tell students that today they are going to prepare and taste a simple spinach salad recipe.

Divide students into five small groups of 5-6 students. Have each group go to a food preparation station.



#### Ask students:

- Who has eaten a spinach salad before? What did it taste like?

Distribute to all students, *Student Handout 8.3, It's a Tasty Crime—Spinach Strawberry Salad.*

Have students read the recipe silently to themselves.

### STEP 3

**Have students begin the food preparation activity.** Before students begin the food preparation, have them retrieve *Student Handout 1.1, Stay Healthy: Wash Your Hands!* (Lesson 1) from their *Garden Detective Journals* and review its key points. Then have all students wash and dry their hands according to the guidelines on the handout.

Have children put on plastic gloves to ensure food safety and large T-shirts, smocks, or aprons to protect their clothes. Distribute the following items to each group:

- 1 plastic knife
- 1 large bowl
- 1 tablespoon for measuring
- 1 large spoon for mixing
- 1 set of measuring cups
- 1 sealable jar
- Ingredients for recipe

### STEP 4

**Inform students that a recipe thief has secretly entered the cafeteria during the night and stolen the bottle of salad dressing!** In order to make the salad, they'll need to mix their own salad dressing.

Write the following ingredient list on the board:

- ¼ cup olive oil
- 3 tablespoons vinegar
- ¼ teaspoon salt
- ⅛ teaspoon pepper

Have each group measure these ingredients and place them in the jar.



**Ask students:**

- **What happens when oil and vinegar are mixed together?** (The oil floats on top of the vinegar; they do not blend.)

Now have each group vigorously shake its jar of oil and vinegar. Ask students:

- **What happens when oil and vinegar are mixed together?** (The mixture emulsifies. An emulsion occurs when droplets of one liquid become suspended in the other. The liquids will separate over time.)

**STEP 5**

**Instruct all groups to follow the recipe** on *Student Handout 8.3, It's a Tasty Crime—Spinach Strawberry Salad*, and prepare five servings of Spinach Strawberry Salad. Make sure each member of each student group has a food preparation task to complete (e.g., chopping, measuring, mixing).

**STEP 6**

**Have students taste the spinach salad.**

First, have students wash their hands according to the guidelines on *Student Handout 1.1*. Next, review *Student Handout 1.2, The Garden Detectives' Tasting Code* from students' *Garden Detective Journals* (or project *Overhead/Slide 1.2* from Lesson 1) by reading the tasting guidelines aloud.

Distribute a paper plate, napkin, and fork to each student. Have each group distribute an equal portion of the spinach salad from the bowl to the group members and have them taste it.



**Ask the students:**

- What did you think of the Spinach Strawberry Salad?
- Were you surprised by the way it tasted?
- What are some other dishes you can prepare using spinach?

## Crime #3: The Case of the Incredible Shrinking Ingredient

### Time Required

60 minutes

### Materials

- *Student Handout 1.1, Stay Healthy: Wash Your Hands!* (Lesson 1)
- *Student Handout 1.2, The Garden Detectives' Tasting Code* (Lesson 1)
- *Student Handout 8.4, It's a Tasty Crime—Dark-Green Pizza*
- Ingredients for Dark-Green Pizza
  - 3 packs pre-split English muffins (six muffins/pack)
  - 6 bunches Swiss chard
  - Minced garlic
  - Olive oil
  - 3 8-oz bags shredded low-fat mozzarella cheese
  - 6 oz grated Parmesan cheese (about 1 ½ cups)
  - 1 can of non-stick olive oil cooking spray
  - ¾ teaspoon each salt and pepper
- 6 large bowls for mixing
- 6 sets of dry measuring cups
- 6 plastic forks
- 6 plastic spoons
- Aluminum foil
- Permanent markers
- Baking trays to fit oven
- Paper plates, one per student
- Napkins or paper towels, one per student
- Oven or toaster oven
- Large frying pan (optional)
- Hot plate (optional)

### Preparation

- Request assistance from the school food service or parents for the food preparation portion of this lesson. They will need to sauté the chard and bake at least 30 servings of the Swiss chard pizza.
- Obtain ingredients for Swiss chard pizza, if requested by the school food service.
- Duplicate one copy of *Student Handout 8.4* on 3-hole-punch paper for each student.
- Duplicate one copy of *Student Handouts 1.1* and *1.2* on 3-hole-punch paper for each student, if you have not previously done so.
- Wash the surface of the desk or tables with hot, soapy water. Sanitize with a solution of 1 tablespoon of unscented liquid chlorine bleach per gallon of water.
- Prepare six food preparation stations with ingredients equally divided and placed at each area.
- Explain the food preparation task to volunteers.

### Instructional Process

#### STEP 1

#### Review information about Swiss chard.

Have the Swiss chard garden detectives report on their plants' progress in the garden by reviewing the growth pattern on the *Be a Garden Detective!* bulletin board. Next, have them share the posters and PSAs they created in Lesson 3: *Investigate like Super Sleuths* with their classmates.

Review the following important information about Swiss chard:

- Swiss chard is an excellent source of vitamin A and a good source of vitamin C.
- Swiss chard, like spinach and leaf lettuce, is a cool season plant that is grown in the spring and fall in most parts of the country.

**STEP 2**

**Introduce the food preparation activity.**

Tell students that today they are going to make pizza! Ask students to raise their hands if they like pizza.

Tell students that a dastardly recipe thief has made off with the traditional tomato sauce. Instead, they are going to make a dark-green pizza. Ask students to suggest dark-green vegetables from the class garden that could be used to make a tasty dark-green pizza.

Explain to students that both spinach and Swiss chard would be good candidates for pizza. Today, they're going to make pizza with Swiss chard.

Distribute to all students *Student Handout 8.4, It's a Tasty Crime—Dark-Green Pizza*.

Have students read the recipe silently to themselves.

**STEP 3**

**Have students prepare the Swiss chard for the pizza.** Before students begin food preparation, ask them to retrieve Student *Handout 1.1, Stay Healthy: Wash Your Hands!* (Lesson 1) from their *Garden Detective Journals* and review its key points. Then have all students wash and dry their hands according to the guidelines on the handout.

Divide students into six groups. Send each group to a food preparation station that contains a large mixing bowl and a bunch of Swiss chard. Have the students rinse the Swiss chard in the sink, tear it into bite-size pieces, and place them in the bowl. Next, have the students measure the number of cups of Swiss chard that are in the bowl.

Take the torn up Swiss chard to the cafeteria for sautéing in olive oil and garlic (see recipe in Teacher Background Information, Lesson 1). Cafeteria staff should return six equal portions of wilted Swiss chard. If cafeteria facilities are not available, you can sauté the Swiss chard in a large frying pan on a hot plate.

When the Swiss chard has been prepared and returned to the classroom, distribute a bowl to each student group. Make two columns on the board: Before and After. Have students measure the prepared Swiss chard and compare the pre- and post-cooking amounts. List their findings in the appropriate columns on the board. As a class, calculate the average difference across groups.



**Ask students:**

- **What happened to the Swiss chard?** (The volume became smaller because the moisture in the leaves evaporates in the heat.)

**STEP 4**

**Continue the Swiss chard pizza preparation.** Send each group of students back to their food preparation station where ingredients and supplies are located and complete the preparation steps in *Student Handout 8.4*. Make sure each member of each student group has a food preparation task to complete.

Place the prepared Swiss chard pizzas on baking sheets and bake (in cafeteria oven or toaster oven in the classroom). Keep track of the placement of each student's pizza.

**STEP 5**

**Have students taste the Swiss chard pizza after baking.** First, have all students wash and dry their hands according to the guidelines on *Student Handout 1.1*. Next, review *Student Handout 1.2, The Garden Detectives' Tasting Code* from students' *Garden Journals* (or project *Overhead/Slide 1.2* from Lesson 1) by reading the tasting guidelines aloud.

Distribute to each student one Swiss chard pizza on a paper plate and a napkin. Have the students taste the pizza.



**Ask the students:**

- **What did you think of the Swiss chard pizza?**
- **Were you surprised by the way it tasted?**
- **What are some other dishes you can prepare using Swiss chard?**

## Teacher Background Information

### Get the Facts on Leaf Lettuce, Swiss Chard, and Spinach

#### Vocabulary

**Folate:** A vitamin that promotes healthy blood cells that is also important for cell division, such as in pregnancy and growth.

**Magnesium:** A mineral that is important for muscle and nerve functioning.

**Minerals:** Nutrients such as calcium, potassium, magnesium, iron, and zinc; some regulate body processes while others become part of body tissues.

**Nutrients:** Substances, including vitamins and minerals, found in food that nourish your body.

**Potassium:** A mineral that maintains heart health, regulates body fluids and is needed for muscle and nerve functioning.

#### Public Service Announcement (PSA):

A short message that appears on radio or TV to promote a service or idea that is good for people's health and well-being. A PSA is just like a commercial for a product, except that a TV or radio station plays it for free as a public service.

**Vitamin A:** A vitamin that promotes growth and healthy skin and hair. It also helps the body resist infections and helps eyes adjust to darkness.

**Vitamin C:** A vitamin that increases resistance to infections and helps wounds heal. It is also important in helping to keep blood vessels and gums healthy.

#### Nutrition Information for Green Leaf Lettuce

| Leaf Lettuce                      |               |
|-----------------------------------|---------------|
| Nutrition Facts                   |               |
| Serving Size 1 cup shredded (36g) |               |
| Amount Per Serving                | % Daily Value |
| Calories 5                        |               |
| Calories from Fat 0               |               |
| Total Fat 0g                      | 0%            |
| Saturated Fat 0g                  | 0%            |
| Cholesterol 0mg                   | 0%            |
| Sodium 10mg                       | 0%            |
| Total Carbohydrate 1g             | 1%            |
| Dietary Fiber 1g                  | 2%            |
| Sugars 0g                         |               |
| Protein 0g                        |               |
| Vitamin A                         | 53%           |
| Vitamin C                         | 6%            |
| Calcium                           | 1%            |
| Iron                              | 2%            |
| Potassium                         | 2%            |
| Folate                            | 4%            |

\* Percent Daily Values are based on a 2,000-calorie diet.

### Nutrition Information for Swiss Chard

| Raw Swiss Chard                   |               |
|-----------------------------------|---------------|
| Nutrition Facts                   |               |
| Serving Size 1 cup, chopped (36g) |               |
| Amount Per Serving                | % Daily Value |
| Calories 7                        |               |
| Calories from Fat 0               |               |
| Total Fat 0g                      | 0%            |
| Saturated Fat 0g                  | 0%            |
| Cholesterol 0mg                   | 0%            |
| Sodium 77 mg                      | 3%            |
| Total Carbohydrate 1g             | 0%            |
| Dietary Fiber 1g                  | 2%            |
| Sugars 0g                         |               |
| Protein 1g                        |               |
| Vitamin A                         | 44%           |
| Vitamin C                         | 18%           |
| Calcium                           | 2%            |
| Iron                              | 4%            |
| Potassium                         | 4%            |
| Folate                            | 1%            |

\* Percent Daily Values are based on a 2,000-calorie diet.

### Nutrition Information for Spinach

| Raw Spinach                       |               |
|-----------------------------------|---------------|
| Nutrition Facts                   |               |
| Serving Size 1 cup, chopped (30g) |               |
| Amounts Per Serving               | % Daily Value |
| Calories 5                        |               |
| Calories from Fat 0               |               |
| Total Fat 0g                      | 0%            |
| Sodium 25mg                       | 1%            |
| Total Carbohydrate 1g             | 0%            |
| Dietary Fiber 1g                  | 3%            |
| Sugars 0g                         |               |
| Protein 1g                        |               |
| Vitamin A                         | 60%           |
| Vitamin C                         | 15%           |
| Calcium                           | 2%            |
| Iron                              | 4%            |
| Potassium                         | 5%            |
| Folate                            | 15%           |

\* Percent Daily Values are based on a 2,000-calorie diet.

Source: United States Department of Agriculture, Agricultural Research Service. 2011. USDA National Nutrient Database for Standard Reference, Release 24. Nutrient Data Laboratory Home Page, <http://www.ars.usda.gov/ba/bhnrc/ndl>

## Student Handout 8.2 Answer Key:

# The Case of the Scrambled Recipe

Name: \_\_\_\_\_ Date: \_\_\_\_\_

A nasty computer bug has mysteriously scrambled the recipe for Chicken Caesar Salad Wraps. Your job is to find the missing ingredient and to unscramble the steps for preparing the recipe.

## Chicken Caesar Salad Wraps

### Ingredients

- 1 chicken breast
- 1 tomato
- 6 leaf lettuce leaves

What's missing? **1 tablespoon fat-free Caesar salad dressing**

### Preparation

1. Rinse lettuce leaves and tomato under running water and pat dry.
2. Arrange on a platter and serve.
3. Place equal amounts of salad mixture on each lettuce leaf.
4. Wash hands and clean your work area.
5. Combine the chicken, tomatoes, and salad dressing in a bowl and mix well.
6. Roll from one end of the lettuce leaf to the middle. Fold in the sides and continue to roll.

Write the steps to preparing the recipe in the correct order:

1. Wash hands and clean your work area.
2. Rinse lettuce leaves thoroughly and pat dry.
3. Combine the chicken, tomatoes, and salad dressing in a bowl and mix well.
4. Place equal amounts of salad mixture on each lettuce leaf.
5. Roll from one end of the lettuce leaf to the middle. Fold in the sides and continue to roll.
6. Arrange on a platter and serve.



## Student Handout 8.1

# It's a Tasty Crime—Chicken Caesar Salad Wraps



Name: \_\_\_\_\_

Date: \_\_\_\_\_

## Chicken Caesar Salad Wraps

### Ingredients

- 1 chicken breast
- 1 tomato
- 1 tablespoon fat-free Caesar salad dressing
- 6 leaf lettuce leaves

### Preparation

1. Wash hands and clean your work area.
2. Rinse tomato and lettuce leaves under running water and dry thoroughly (for example, with a salad spinner or by patting them with a paper towel).\*
3. Combine the chicken, tomatoes, and salad dressing in a bowl and mix well.\*
4. Place equal amounts of salad mixture on each lettuce leaf.\*
5. Roll from one end of the lettuce leaf to the middle. Fold in the sides and continue to roll.\*
6. Arrange on a platter and serve.\*

### Yield

Six servings, 1 wrap each

You can complete all starred\* preparation steps.  
All other preparation steps should be completed by adults.

Refrigerate cut fruits, vegetables, and cooked foods promptly.  
Do not leave at room temperature for longer than 2 hours  
(or 1 hour in temperatures above 90° F).

**Be a great garden detective! Discover what foods taste great with dark-green veggies.**



## Student Handout 8.2

# The Case of the Scrambled Recipe



Name: \_\_\_\_\_ Date \_\_\_\_\_

A nasty computer bug has mysteriously scrambled the recipe for Chicken Caesar Salad Wraps. Your job is to find the missing ingredient and to unscramble the steps for preparing the recipe.

## Chicken Caesar Salad Wraps

### Ingredients

- 1 chicken breast
- 1 tomato
- 6 leaf lettuce leaves

What's missing? \_\_\_\_\_

### Preparation

1. Rinse lettuce leaves and tomato under running water and pat dry.
2. Arrange on a platter and serve.
3. Place equal amounts of salad mixture on each lettuce leaf.
4. Wash hands and clean your work area.
5. Combine the chicken, tomatoes, and salad dressing in a bowl and mix well.
6. Roll from one end of the lettuce leaf to the middle. Fold in the sides and continue to roll.

Write the steps to preparing the recipe in the correct order:

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
4. \_\_\_\_\_
5. \_\_\_\_\_
6. \_\_\_\_\_



## Student Handout 8.3

# It's a Tasty Crime—Spinach Strawberry Salad



Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Spinach Strawberry Salad

### Ingredients

|                           |                       |                   |
|---------------------------|-----------------------|-------------------|
| 2 cups raw spinach        | ¼ cup olive oil       | ¼ teaspoon salt   |
| ½ cup sliced strawberries | 3 tablespoons vinegar | ⅛ teaspoon pepper |

### Preparation

1. Wash hands and clean your work area.\*
2. Rinse spinach and strawberries under running water, dry thoroughly, and tear into bite-sized pieces.\*
3. Combine spinach with sliced strawberries.\*
4. Mix olive oil, vinegar, salt, and pepper in a jar with a lid. Shake vigorously.\*
5. Pour salad dressing over salad and mix thoroughly.\*

### Yield

Five ½-cup servings

You can complete all starred\* preparation steps.  
All other preparation steps should be completed by adults.

Refrigerate cut fruits, vegetables, and cooked foods promptly.  
Do not leave at room temperature for longer than 2 hours  
(or 1 hour in temperatures above 90° F).

**Be a great garden detective! Discover what foods taste great with dark-green veggies.**



## Student Handout 8.4

# It's a Tasty Crime—Dark-Green Pizza



Name: \_\_\_\_\_ Date: \_\_\_\_\_

## Dark-Green Pizza

### Ingredients

3 pre-split English muffins

Olive oil spray

1 bunch Swiss chard (about 11 oz, stems removed, roughly chopped) sautéed in olive oil and garlic

$\frac{1}{8}$  teaspoon salt

$\frac{1}{8}$  teaspoon pepper

1 cup shredded low-fat mozzarella cheese

$\frac{1}{2}$  cup grated Parmesan cheese

### Preparation

1. Wash hands and clean your work area.
2. Preheat oven to 450° F.
3. Split muffins into two halves with your fingers.
4. Rinse Swiss chard under running water.
5. Spray the muffin halves lightly with olive oil.\*
6. Spread the Swiss chard evenly over the muffin halves and season with salt and pepper.\*
7. Top with shredded mozzarella and Parmesan cheese.\*
8. Bake on a baking sheet for 10-12 minutes.

### Yield

Six half-muffin servings

You can complete all starred\* preparation steps.

All other preparation steps should be completed by adults.

Refrigerate cut fruits, vegetables, and cooked foods promptly. Do not leave at room temperature for longer than 2 hours (or 1 hour in temperatures above 90° F).

**Be a great garden detective!**

**Discover what foods taste great with dark-green veggies.**



# Garden Detective News



## Grow Healthy Habits With Your Children

Choose recipes that liven up your meals with fruits and vegetables.



United States  
Department of  
Agriculture



## Garden Detective News

This week, the garden detectives learned how to prepare some of the dark-green vegetables we are learning about in class and growing in the garden. They prepared and tasted recipes featuring dark-green vegetables (really, it's true!). The recipes are included in this newsletter so you can try them at home.

The garden detectives also learned how to follow instructions in a recipe and use standard units of measurement to prepare their dish. It was a tasty way to teach English and math concepts! They also learned why dark-green vegetables are an important part of a healthy diet.

In the green box to the right, there are a few tips for adding dark-green veggies to your family's meals. Recipes the garden detectives prepared and tasted in class are also in this newsletter.

### Mystery Solved!

#### Ways To Help Your Child Eat More Dark-Green Veggies.

##### How To Add More Leaf Lettuces to Your Family's Meals:

- Serve side salads for lunch or dinner.
- Add green leaf lettuce to your favorite sandwich, pita pockets, or wraps.
- Make a wrap using lettuce (see the Chicken Caesar Salad Wrap recipe we made in class on the following page).

##### How To Add More Spinach to Your Family's Meals:

- Mix spinach with lettuce in side salads for lunch and dinner (see the Spinach Strawberry Salad recipe we tasted in class on the following page).
- Add chopped spinach to lasagna and soup.
- Stir plain yogurt into chopped or puréed spinach for a low-fat version of creamed spinach.
- Try stir-frying spinach with garlic, onion, and chopped red bell peppers for a colorful tasty side dish.

##### How To Add More Swiss Chard to Your Family's Meals:

- Toss pasta with olive oil, lemon juice, garlic, and cooked Swiss chard.
- Add zest to omelets and frittatas by adding some cooked Swiss chard.
- Use chard in place of, or in addition to, spinach when preparing recipes.
- Try the Dark-Green Pizza recipe that we tasted in class on the following page.

## Garden Detective Recipes

### Chicken Caesar Salad Wraps

#### Preparation Time

10 minutes

#### Ingredients

- 6 leaf lettuce leaves, cleaned and separated\*
- 1 tomato
- 1 boneless, skinless chicken breast, cooked and chopped
- 1 tablespoon fat-free Caesar salad dressing

#### Preparation

1. Wash hands and clean your work area.
2. Rinse lettuce leaves thoroughly under running water and dry thoroughly (e.g., with a salad spinner or by patting them with a paper towel).\*
3. Rinse and dry tomato,\* then chop into bite-sized pieces.
4. Combine the chicken, tomatoes, and salad dressing in a bowl and mix well.\*
5. Place equal amounts of salad mixture on each lettuce leaf.\*
6. Roll from one end of the lettuce leaf to the middle. Fold in the sides and continue to roll.\*
7. Arrange on a platter and serve.\*

#### Yield

Six individual lettuce wraps

### Dark-Green Pizza

#### Preparation Time

20 minutes

#### Ingredients

- 1 bunch Swiss chard (stems removed, roughly chopped)
- ¼ cup olive oil
- 4 cloves garlic, minced
- 3 pre-split English muffins
- 1 can non-stick olive oil cooking spray
- ⅛ teaspoon salt
- ⅛ teaspoon pepper
- 1 8-oz bag shredded low-fat mozzarella cheese
- ½ cup Parmesan cheese

#### Preparation

1. Wash hands and clean your work area.
2. Preheat oven to 450° F.
3. Sauté Swiss chard in olive oil and garlic.
4. Split the English muffins in half with your fingers.\*
5. Spread the Swiss chard evenly over the six muffin halves.\*
6. Season with salt and pepper.\*
7. Top with shredded mozzarella and Parmesan cheese.\*
8. Bake on a baking sheet for 10-12 minutes.

#### Yield

Six servings of individual pizzas

### Spinach Strawberry Salad

#### Preparation Time

10 minutes

#### Ingredients

- 2 cups raw spinach
- ¼ cup olive oil
- ¼ teaspoon salt
- ½ cup sliced strawberries
- 3 tablespoons vinegar
- ⅛ teaspoon pepper

#### Preparation

1. Wash hands and clean your work area.\*
2. Rinse spinach and strawberries under running water, dry thoroughly, and tear into bite-sized pieces.\*
3. Combine spinach with sliced strawberries.\*
4. Mix olive oil, vinegar, salt, and pepper in a jar with a lid. Shake vigorously.\*
5. Pour salad dressing over salad and mix thoroughly.\*

#### Yield

Five ½-cup servings

The starred\* preparation steps can be completed by children. All other preparation steps should be completed by adults.

Refrigerate cut fruits, vegetables, and cooked foods promptly. Do not leave at room temperature for longer than 2 hours (or 1 hour in temperatures above 90° F).



## Family Activity 8

# Try Something New With Your Child

Why not try a new fruit and a vegetable every day for 1 week? Choose ones that begin with the first letter of that day of the week. For example:

| DAY OF THE WEEK | VEGETABLE      | FRUIT        |
|-----------------|----------------|--------------|
| Monday          | Mustard Greens | Mango        |
| Tuesday         | Turnips        | Tangerine    |
| Wednesday       | Watercress     | Watermelon   |
| Thursday        | Tomatillo      | Tangelo      |
| Friday          | Fava Beans     | Fig          |
| Saturday        | Swiss Chard    | Star Fruit   |
| Sunday          | Summer Squash  | Strawberries |

Record what your family will try:

| DAY OF THE WEEK | VEGETABLE | FRUIT |
|-----------------|-----------|-------|
| Monday          |           |       |
| Tuesday         |           |       |
| Wednesday       |           |       |
| Thursday        |           |       |
| Friday          |           |       |
| Saturday        |           |       |
| Sunday          |           |       |

## Lesson Extension: An Acrostic Poem

### Standards Addressed

#### English/Language Arts

Standard 3, Language: *Use knowledge of language and its conventions when writing, speaking, reading, or listening.*

### Learning Objectives

Students will be able to write an acrostic poem.

### Time Required

20 minutes

### Materials

- *Student Handout 8.5, It's a Tasty Crime Poem*

### Preparation

- Duplicate one copy of *Student Handout 8.5* on 3-hole-punch paper for each student.

### Instructional Process

#### STEP 1

**Distribute *Student Handout 8.5, It's a Tasty Crime Poem*.** Tell the students that they are going to create an acrostic poem using the letters of the words **lettuce**, **spinach**, or **Swiss chard**. Explain that an acrostic poem uses the letters in a word to begin each line of the poem. All lines of the poem relate to or describe the main topic word.

Point out the example on the handout and read it aloud.

#### STEP 2

**Have students complete *Student Handout 8.5, It's a Tasty Crime Poem*.** Tell students that they may choose which vegetable they would like to create an acrostic poem for. Instruct students to complete their poem.

#### STEP 3

**Have students share acrostic poems.** Ask for volunteers to share their acrostic poems.

## Student Handout 8.5

# It's a Tasty Crime Poem



Name: \_\_\_\_\_ Date: \_\_\_\_\_

### Directions

Using the letters in the word LETTUCE, SPINACH, or SWISS CHARD, create an acrostic poem. An acrostic poem uses the letters in a word to begin each line of the poem. All lines of the poem relate to or describe the main topic word.

### EXAMPLE:

- O: Orange in color
- R: Round in shape
- A: Always sweet to the taste
- N: Nutritious
- G: Grown on trees
- E: Everyone loves to eat

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