

# Color Me Healthy: Enjoying Fruits and Vegetables



Kansas State University  
Agricultural Experiment  
Station and Cooperative  
Extension Service








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## Suggested Introduction

Colorful, tasty fruits and vegetables provide beneficial substances that help maintain health. Eating a diet with plenty of pigments and antioxidants helps slow the processes associated with aging and protect against some chronic diseases. This lesson will describe benefits of eating fruits and vegetables in a variety of colors, and discuss which are especially good for health. Resources for fresh produce selection, handling and preparation are included.

### Educational Goals

As a result of participating in this program, it is intended that the learner will be able to:

-  Identify different color groups of fruits and vegetables.
-  Make meal and snack choices that include five to nine servings of fruits and vegetables daily.
-  Describe several health benefits associated with eating fruits and vegetables.
-  Verbalize practices and plans of fruit and vegetable consumption.
-  Enjoy learning and increase the desire for fruits and vegetables each day.

## Suggested Program Preparation

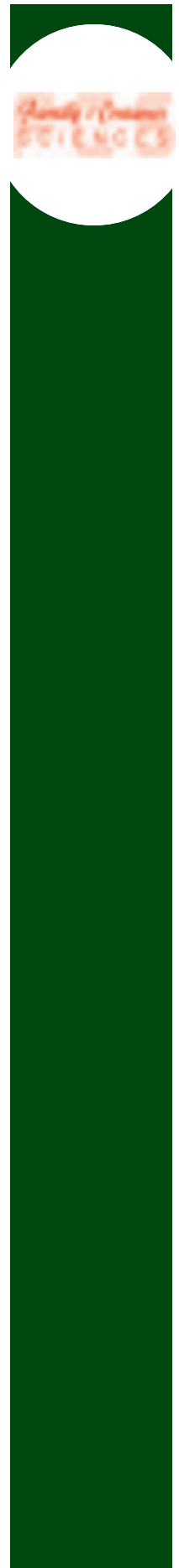
1. Review this leader's guide and accompanying fact sheet, *Color Me Healthy: Enjoying Fruits and Vegetables*, MF-2649.
2. Visit the K-State Research and Extension Human Nutrition fruits and vegetables Web site at: [www.oznet.ksu.edu/humannutrition/freshfruitsandvegetables.htm](http://www.oznet.ksu.edu/humannutrition/freshfruitsandvegetables.htm). For instance, click on the link for the *Fix It Fresh!* cookbook, which includes fact sheets describing ways to select, store and prepare more than 20 fresh fruits and vegetables. Other resources on the site provide nutrition and food safety information, posters, children's activities and links to other sites.
3. Lesson materials you will need are: scissors, large poster paper and markers. For each participant, provide a pen or pencil, notepaper and a copy of:
  - a. *Color Me Healthy: Enjoying Fruits and Vegetables*, MF-2649, including the participant survey (pages 7–8).
  - b. Any recipes you want to distribute.

4. The presentation room should allow space for participants to stand up and move around, and should have plenty of surfaces (tables, counters or desks).
5. For a participant activity, bring spoons, tongs, measuring cups, drinking glasses and plates of various sizes, along with juice in a pitcher or carton and about 2 cups each of the following: leafy greens, canned or frozen vegetables and dried fruit.
6. If feasible, display some of the fruits and vegetables from each of the color groups (refer to the lists on pages 2–5 of the fact sheet).
7. If feasible, prepare taste samples of some uncommon fruits and vegetables.
8. If feasible, prepare taste samples of one or two recipes featuring fruits and vegetables. (Remember safety: Be sure to keep hot foods hot and cold foods cold.)
9. The long phytochemical names in the fact sheet can be intimidating, but you do not have to discuss each one. The point of including the information is the scientific basis for why fruits and vegetables are so healthful. Researchers continue to discover more reasons to include them in the daily diet.

## Suggested Program Presentation Guide

1. Introduce yourself. Give each participant a pen or pencil and a copy of the fact sheet. Ask them to write their names on the fact sheets and then to glance through it. Allow several minutes for this.
2. Ask participants to think about one favorite fruit and vegetable and the ways they like to serve them. Allow about one minute for them to think. Then ask them to turn to one person sitting nearby and discuss the fruit and vegetable each chose and why. Allow about three minutes for them to talk in pairs. Then ask all participants to stand and gather into different groups based on either their fruit's or their vegetable's color category (red, yellow/orange, green, blue/purple, white/brown). Allow about three minutes for them to talk to each other in these groups about which food each thought of and how they like to prepare the food. Then ask four or five volunteers (or more) to share their answers with the entire group. Thank the group for participating.
3. Discuss with your audience the uncommon fruits and vegetables you brought. Allow time for everyone to examine and taste them. Provide samples of any recipes you prepared and distribute recipes, if appropriate.

4. Discuss the fact sheet, emphasizing these four concepts:
    - a. Eat a rainbow of fruits and vegetables: They help meals and snacks look and taste great.
    - b. Choose a variety of fruits and vegetables within each color group, since each offers unique benefits.
    - c. Fruits and vegetables can be convenient to eat any time of day.
    - d. Eat five to nine servings a day of colorful fruits and vegetables for good health.
  5. Ask participants to complete the “fill in the blank” questions on page 6 of the fact sheet. Give them a little time, then lead a discussion of the answers. On the large poster paper, write the heading “Ideas for eating colors each day” and record a short version of their responses, or ask a volunteer to help. Pose questions to the group about their experiences eating each color category of fruits and vegetables. Ask something like, “What red fruits and vegetables do you or your family enjoy for breakfast? ... lunch? ... supper? ... snacks? ... when eating out?” The idea is to end up with a list of each of the five color categories of fruits and vegetables that members of the group and their families enjoy. Encourage them to write new ideas on their fact sheet or notepaper.
  6. Review the standard serving sizes of fruits and vegetables on page 6 of the fact sheet. People are often surprised at how small one serving is. If possible, set up areas around the room where participants can practice dishing up leafy greens, canned or frozen vegetables, dried fruit and juice. Have them use a measuring cup to see how much they put on the plate or poured into a glass. If you cannot do this participant activity, then show the group samples of standard servings for different fruits and vegetables.
  7. Ask participants to complete the participant survey on pages 7–8 of the fact sheet. Read each question aloud as they each record their answers. Collect the surveys to mail to the address shown.
  8. Thank the audience for participating. If desired, schedule a meeting to plan one of the suggested community service activities. (See back page.)
- The author thanks reviewer Julie Garden-Robinson, PhD, LRD, Food and Nutrition Specialist and Assistant Professor, North Dakota State University Extension Service, Fargo, N.D.



The lists of fruits and vegetables may be more important to your audience than the phytochemical names. Following is a pronunciation guide.

allicin (al'-la-sin)  
 anthocyanin (an-tho-sigh'-a-nin)  
 beta carotene (bay'-ta care'-a-teen)  
 betacyanin (bay-ta-sigh'-a-nin)  
 carotenoid (care-a'-ton-noid)  
 chlorophyll (klor'-a-fill)  
 cruciferous (crew-sif'-fer-us)  
 edamame (ed'-a-mommy)  
 ellagic (ee-ladge'-ic)  
 flavanone (flaive'-a-known)  
 flavonoid (flaive'-annoyed)  
 folic (fole'-ic)  
 genistein (jen'-is-steen)  
 glutathione (gloot-a-thigh'-own)  
 indole (in'-doal)  
 isoflavone (eye-so-flave'-own)  
 isothiocyanate (eye-so-thigh-o-sigh'-a-nate)  
 jicama (hick'-ah-ma)  
 limonoid (lime'-annoyed)  
 lutein (lue'-teen)  
 lycopene (lye'-coe-peen)  
 nutraceutical (new-tra-sue'-tic-cull)  
 phytoestrogen (fight-o-es'-troe-jen)  
 polyacetylene (poly-a-set'-a-leen)  
 polyphenol (poly-fee'-nol)  
 querciten (kwhere'-sit-ten)  
 resveratrol (res-veer'-a-trol)  
 saponin (sah-poe'-nin)  
 sulforaphane (sul-four'-a-fane)  
 tannin (tan'-nin)  
 zeaxanthin (zee-a-zan'-thin)

## Ideas for Community Service Activities

- Sponsor cooking demonstrations using fruits and vegetables recommended in the lesson.
- Work with a local newspaper or radio/television station to sponsor a recipe contest that features fruits and vegetables. Publish or distribute the winning recipes.
- Sponsor a community garden project.
- Work with local grocery store, restaurant, coffee shop or gas station staff to feature weekly sales and provide point-of-purchase information on fruits and vegetables.
- Sponsor a “healthy foods – great taste” fair or booth at another community event. Serve samples of uncommon fruits and vegetables or new recipes.
- Promote farmers’ markets, roadside stands, etc., that sell locally grown foods recommended in the lesson.
- Present this program to established community groups.

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