



The Last Orange on Earth....A Child's View A Lesson Plan for Youth Educators

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Background for educators

This is an activity designed to help upper elementary level students become more mindful when they eat. It is adapted from a University of Wyoming Extension publication titled, *The Last Orange on Earth: An activity to teach mindful eating*¹. Here is how Deborah Johnson and Suzanne Pelican, the authors of *The Last Orange on Earth*, explain the importance of mindful eating:

Experts agree that *what* we eat greatly affects our health. But what about *how* we eat? Do we think about our food while we eat it, or too often do we eat while we drive, type on a keyboard, read a book, watch TV, or play a computer game? Based on research from the WIN the Rockies^{2,3} project, eating while doing something else increases the chances of a person gaining excess weight. But regardless of how much we weigh, this distracted or mindless eating is an unhealthy habit. . . . Being mindful when we eat is an important part of having a healthy lifestyle⁴.

Learner objectives

As a result of this experience and taking time to actively see, smell, feel and taste an orange while they eat it, participants will

- 🍊 Recognize the importance of taking time to enjoy the food they eat.
- 🍊 Value food as more than something to fill them up.
- 🍊 Appreciate that an ordinary food can be uniquely satisfying.

Target Ages

3rd, 4th, and 5th
Grade Students

Approximate time:

1 hour

What you will need

- 🍊 Students/participants working with partners. (***FYI: It would be helpful if the teacher would partner up the students.***)
- 🍊 Washed oranges, one for every group.
- 🍊 Paper towels or napkins.
- 🍊 Paring knives for teachers.
- 🍊 Plastic knives for each student/participant.
- 🍊 Pictures of blossom, tree, leaves and fruit.
- 🍊 Optional Activity: Items for “Sunny Salsa.”
- 🍊 “Our Guesses” sheet for each student/participant.*
- 🍊 “Response Sheet” for each student/participant.*
- 🍊 “Cool Facts” handout for each student/participant.* Hand out at the end of the lesson.

* Included in the CD/handout.

Lesson Introduction

Working with your partner, can you guess what we will be studying today? As I read you a cool fact, can you guess what I am talking about? With your partner, write down what you think I am talking about on your guess sheet.

Cool Facts⁵: (FYI’s are for teacher information only. Do not read to students.)

- 🍊 Columbus brought the first seeds and seedlings to the Western Hemisphere on his second voyage in the year 1493.
- 🍊 Their trees are evergreen that can produce leaves, flowers and fruit all at the same time. (***FYI: Evergreen means having foliage that remains green and functional through more than one growing season.***)
- 🍊 They are the most produced citrus crop in the world. (***FYI: Citrus is a group of thorny trees and shrubs grown in warm regions for their edible fruit such as lemons, limes, oranges and grapefruits. Citrus fruit is often used as a symbol of healthy eating, mainly because of the vitamin C content.***)
- 🍊 They are very popular with athletes because they can be eaten for a quick burst of energy.
- 🍊 There is very little waste left when you are finished eating one, all of which is biodegradable.
- 🍊 Some get their name because the bottom looks like a bellybutton.
- 🍊 They make a great snack.
- 🍊 One of them contains all the vitamin C your body needs for a day.
- 🍊 The two most common varieties are navel and Valencia.
- 🍊 Its name is the same as its color.

Who thinks they know the name of this citrus crop?

Student Response/Observation Steps:

1. Wash your hands.
2. Do the steps together as a class.
3. Admire the color, shape, and texture of the fruit. Record your findings on your response sheet on the appearance line.
4. Oranges grow on trees in warm climates. Close your eyes and imagine where your orange grew. Can you feel the warm sun? Can you smell the blossoms? Can you see the fruit on the trees?
5. Open your eyes and smell the orange. Record your findings. **(FYI: At this time, showing the pictures of the blossom, tree, leaves and fruit is beneficial.)**
6. Place the orange on a napkin or paper towel. Roll the orange firmly on the napkin to release the orange smell/essence. Pick up the orange again and smell the aroma. Record your findings.
7. Use the plastic knife to scrape the peel of the orange. Does the smell/essence become stronger? Record your findings.
8. At this point explain to the students the difference between the stem end and the blossom end of an orange. **(FYI: The orange develops from the blossom end. The blossom end can look like a belly button or navel. The stem end was where the orange was connected to the tree.)**
9. Have your teacher cut your orange in half from the stem end to the blossom end. Does it smell stronger and sweeter now that it has been cut? Keep the blossom end facing you.
10. Peel your half of the orange slowly, taking time to enjoy the aroma, texture, and color. **(FYI: Do not rush this step; let the students enjoy the aroma, texture and color.)**
11. Separate one segment. Examine the inner structure—hundreds of tiny juice-filled sacs. Remember to keep the blossom end facing you.
12. Take a **small** bite of one of the segments from the blossom end and then one from the stem end. Is one end sweeter than the other? Record your findings. **(FYI: The blossom end is sweeter. The blossom end develops more sugar because it is more exposed to the sun. For the same reason, fruits grown in the temperate zone are only 10 to 15 percent sugar while those from the tropics, such as bananas, figs, and dates range 20 to 60 percent sugar.)**
13. Now it is time to just enjoy your fruit. Place a segment in your mouth, close your eyes, and bite down. Pay attention to how the juice bursts into your mouth and fills it with orange flavor.
14. Keep eyes closed. As you chew slowly, and experience the texture of the membranes, describe the feeling as if it were the last orange on earth. Record your findings.
15. Do you usually eat an orange like this? What would happen if you ate all your food like this? Record your findings. **(FYI: While the students enjoy the orange, this would be a great time for a classroom discussion on mindful eating.)**

Optional Activity: “Sunny Salsa”

Assemble and prepare ingredients as directed in the recipe in the parent's newsletter. If time and facilities permit, students can be involved in helping prepare and bag the salsa. Be sure they follow procedures related to food safety and proper use of knives. After the students have experienced the orange with their partner and completed their response sheet, serve the salsa in bags with whole wheat crackers or baked chips on the side.

COOL FACTS ABOUT ORANGES⁵

- 🍊 Christopher Columbus brought the first orange seeds and seedlings to the Western Hemisphere on his second voyage in the year 1493.
- 🍊 Orange trees are evergreen that can produce leaves, flowers, and fruit all at the same time.
- 🍊 Oranges are the most produced citrus crop in the world.
- 🍊 The two most common varieties of oranges are navel and Valencia oranges.
- 🍊 Navel oranges got their name because the bottom of a navel orange looks like a bellybutton or a navel. The bigger the navel in an orange, the sweeter it will be.
- 🍊 There is very little waste with this snack, all of which is biodegradable.
- 🍊 Oranges are very popular with athletes because they can be easily eaten for a burst of energy.
- 🍊 They are nutritious and juicy and make a great snack.
- 🍊 One orange contains all the vitamin C your body needs for the day.
- 🍊 An orange is named for its color.

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References

- 1 Johnson D, Pelican S. *The Last Orange on Earth: An activity to teach mindful eating*. University of Wyoming Cooperative Extension Service publication. Accessible at www.uwyo.edu/ces/pubs/MP112-5.pdf.
- 2 Wellness IN the Rockies (WIN the Rockies) was a research, intervention, and public service project in Wyoming, Montana, and Idaho, funded 2000-04 by USDA/IFAFS award #0004499. For more information, go to www.uwyo.edu/wintherockies.
- 3 Liebman M, Pelican S, Moore SA, Holmes B, Wardlaw MK, Melcher LM, Raidl M, Wheeler B, Haynes GW. Dietary intake-, eating behavior-, and physical activity-related determinants of high body mass index in the 2003 Wellness IN the Rockies cross-sectional study. *Nutrition Research*. 2006; 26:111-117.
- 4 As defined by Joanne Ikeda, retired from the University of California-Berkeley and UC-Berkeley's Center for Weight and Health, "a healthy weight is the weight you achieve when you have a healthy lifestyle." Accordingly, for some people, their healthy weight will be within a so-called "normal" range of BMI while for others, their healthy weight will be outside that range. From this perspective, body weight is one important indicator of health, but there are other important indicators, too. These include blood pressure, levels of fats in the blood (for example, triglycerides and high-density lipoprotein [HDL] and low-density lipoprotein [LDL] cholesterol), fruit and vegetable intakes, frequency and duration of physical activity, etc. Additional publications in the *Focus on Health, Not Weight* series provide information on other aspects of healthy lifestyles related to physical activity, food and eating, and body image.
- 5 These Cool Facts were compiled with information from these sources: "Fun facts about oranges," 2000 fact sheet from Dole Food Company's Nutrition and Health Program, accessed at www.dole5aday.com/FoodService/pdfs/FACTSHEET_Oranges.pdf; "Orange" in *The Oxford Companion to Food* by Alan Davidson, Oxford University Press, New York, 1999, pp. 558-559; and Cool Facts about oranges – fun Kid Facts _Sunkist Kids accessed at www.sunkist.com/kids/facts/oranges.

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