

The Senses Carnival

WIN Kids Curriculum for 5th and 6th grade

Designed for classrooms, community youth groups, and other educational settings



Lesson Objectives

- Recognize the role of the five senses in food choices.
- Appreciate food and eating as satisfying rather than as rushed or guilt-ridden experiences.
- Evaluate how foods stimulate all five senses.



Wellness IN (WIN) the Rockies Principles

- Take pleasure in eating.
- Honor the gift of food.

Health Standards



Content Area - Nutrition and Dietary Behavior

National Health Standards 1 (concepts), 3 (behaviors), and 7 (advocacy)

Wyoming Health Content and Performance Standards 1, 3 and 7

Montana Health Enhancement Content Standards 1

Idaho Grade 5 Health Performance Standards 941 and 942

Idaho Grade 6 Health Performance Standards 951 and 952

Note: Suggested standards can be met depending upon lesson components selected and assessed. Potential assessment tools are designated with a ✓.



Approximate Length

- 25 minutes before lunch
- 10 minutes after lunch



Humans can detect
about 10,000
different odors!

Materials and Preparation



Handouts (1 per student):

Flavor Roller Coaster (2 on a sheet)

Mealtime Merry-Go-Round

WIN the Home: Family Carousel

Brown Bag Lunch Word Lib

Cups for water (1 per student)

Spice gum drops candy (be aware of food allergies or health concerns of students) (one of each color per student). While brands vary, flavors usually include: wintergreen, cinnamon, anise or black licorice, spearmint, orange, cloves, and/or ginger

Samples of actual spices matching the spice gum drop flavors



Background for Educator

Our five senses – sight, sound, touch, smell and taste – make life interesting. All play a role in the enjoyment of food. The variety of colors, temperatures, flavors, aromas, and sounds in food choices are endless. A crunchy, cool carrot is quite a contrast to a hot, steamy plate of mashed potatoes or to a fizzy, ice-cold carbonated beverage. When we take time to truly enjoy and appreciate food, we are usually more fully satisfied with a smaller amount of food.

As much as 80 percent of what we perceive as “taste” is actually smell. Smell occurs when odors reach the olfactory receptors through the nostrils as we inhale or through the back of the mouth as we chew and swallow. The combination of taste and olfaction is called flavor.

Understanding how all five senses are involved in pleasurable eating increases appreciation for a wider variety of foods.

The spice gum drops are suggested for this lesson because the expected flavor usually does not match the actual flavor. Brands vary so it is recommended to taste the gum drops ahead of time to create an answer key for the flavors.



Lesson Script

Flavor Roller Coaster Activity

1. Taste is not the only sense we use while enjoying food. We also use sight, touch, sound and smell. Up to 80 percent of what we think of as taste is actually smell. The combined effect of taste and smell is called flavor.
2. We detect the smell of foods in two ways: first through the nose as we inhale or sniff and second through the back of the mouth as we chew and swallow.
3. For this activity, you will need one spice gum drop of each color and a cup of water. *(Distribute supplies and handout.)*
4. Pick up the white spice gum drop and record the flavor you expect.
5. Smell the white spice gum drop and record the flavor you expect.
6. Place the spice gum drop in your mouth. Chew and record the flavor. Rinse mouth with water and swallow before the next sample.
7. For the yellow spice gum drop, record the flavor you expect by sight. Hold your nose and place the sample in your mouth. Chew a few times and try to guess the flavor while holding your nose. Before swallowing, release your nose. Record your experience. *(Students should experience little taste while the nose is held and then a rush of flavor when the nose is released.)*

8. Repeat this process with the rest of the spice gum drops. (*Students can choose if they want to hold their nose.*)

9. The spice flavors you tasted in the samples are often used in food preparation. (*Show samples of the actual spices if available.*)

10. Let's share your experiences. ✓

What senses did you use for this activity?

Which spice gum drop tasted least like what you thought from its color?

Which spice gum drop tasted least like what you thought from its smell?

What happened when you held your nose? How important is smell to sensing flavor?

Mealtime Merry-Go-Round Activity

1. (*Before lunch or other meal.*) We use all five senses to truly enjoy our food. With the spice gum drops, you experienced how sight, taste and smell affect the experience of eating. Touch and sound are also involved. In your hand or mouth, foods have a feel such as hard, soft, or thick. What other words describe how a food feels (*slimy, chunky, smooth*)?

2. Foods can have a sound as you chew. What different sounds do foods make (*crunch, squeak, swish*)?

3. During lunch time today (*or their next meal*), select three food items and complete the **Mealtime Merry-Go-Round** worksheet. Record your "sense-ations." (*Distribute handout.*)

4. (*After the meal.*) Share meal time "sense-ations" from **Mealtime Merry-Go-Round**. ✓ (*Either small group or entire class.*)



WIN the Home: Family Carousel

Many families have traditional or favorite dishes for holidays and special occasions. Often these have been handed down from generation to generation and may originate in another country or culture. Ask students to take home the **Family Carousel** worksheet and complete with their family.

➤ LANGUAGE or ENRICHMENT Option: Have students prepare a written report from this worksheet and the family discussion. ✓

Please note: pilot testing of lessons has determined that WIN the Home activities are most successful when students have time over a weekend to complete them, when a follow-up is conducted in class, and when students receive credit for completion.



WIN the Community: Marvelous Menus

Rewrite the school lunch menus, senior center menus, local restaurant menus, etc., with sensory descriptive words. For example: ice-cold milk, crunchy garlic toast, thick red spaghetti sauce. Make posters or menus and display in the lunch room, senior center or restaurant. These new menus could also be read during announcements. ✓



Additional Ideas

- Share **Brown Bag Lunch Word Lib** as an extra or free-time activity.
- Conduct blind taste tests. Cut small, peeled cubes of raw apple, carrot, potato, turnip and onion. Assign partners. One person puts on the blind fold and holds his or her nose. The second person feeds half of the cubes, one at a time, to the blind-folded person while he or she guesses the food. Trade roles for remaining cubes. Since these foods have similar textures, they are difficult to taste without the person being able to smell.
- Try a similar taste test with jelly beans that come in a wide variety of unusual flavors.



Sources and Materials

Bouchoux, Ann, and Pitman, Susan, eds. "Taste Matters." *Food Insight: Current Topics in Food Safety and Nutrition*. July/August 1999:1-5. Downloaded 9 Jan. 2002. <<http://ifici.org/foodinsight>>.

United States. Department of Agriculture, Food and Consumer Service. *Team Nutrition Community Action Kit*. MP-1538, 1996: 183-184.

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