

ACTIVITY A

THE SMELLING GAME

Time Required

20 minutes

Suggested Grouping

tables of 4 to 6
children

In this activity you will help the children use their sense of smell to identify and match odors that you have placed in small containers.

Materials You Will Need

- ☐ Film canisters (opaque) — 16 per group
- ☐ Different aromas — 8 (to put in containers)
(peanut butter, cocoa, cinnamon, garlic, vanilla extract, peppermint extract, lemon and orange extracts or juice)
- ☐ Cotton balls — 16 (for extracts) per group
- ☐ Ice pick, nail, or other sharp object
- ☐ Masking tape — 1 roll
- ☐ Permanent marking pen — 1
- ☐ Chart paper
- ☐ Senses Cutouts

Getting Ready

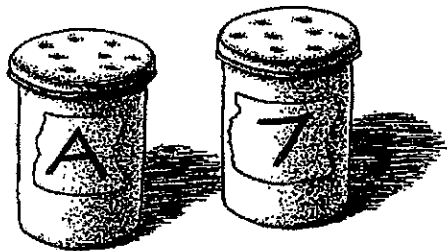
- ① Determine the number of children you will be working with, and the materials needed from the supply list. (You will need a set of eight different scents for each table; two containers per scent, for a total of 16 containers for each table.)
- ② Carefully poke small holes in the lids of the film canisters with a nail or ice pick.
- ③ Using the masking tape and pen, label half the canisters with *numbers* and the other half with *letters*. Be sure to randomly number and letter the containers.



Tip
You can often get recycled film canisters from photo developing stores.



Tip
Make sure the canisters are numbered and lettered in random order when putting in the scents. Remember, part of the activity is for the children to find the matching smells.



Tip
For long-term storage, place a piece of masking tape over the holes in the lid.

SMELLS IN THE KITCHEN

- ④ Shortly before the meeting, put the different aroma items into the canisters. You will need to make two sets of canisters (*one set that is numbered and one set that is lettered*). When putting the extracts into the canisters, first put a cotton ball in the bottom, then drop some of the extract on it. Put on the lid that you prepared in step 2.
- ⑤ While the children are in the circle for the introductory discussion, place the sets of matching smells on each table (*eight scents per table*).

ACTION: OBSERVING, COMMUNICATING, AND COMPARING

1. Ask the children to gather around you and sit in a circle. Start off the day by showing the smell symbol and asking questions about smells.
 - When you walk into your kitchen, what are some things you like to smell?
 - What are some things you don't like to smell?
 - Name some places that have smells you like. Name some places that have smells you don't like.
 - Do you think smells are important? Why or why not?

Record the children's responses.

2. Explain to the children that they are going to be using their sense of smell to identify and match various aromas that are found in the kitchen. Show them one of the canisters, pointing out that it has a number or letter on it and holes in the lid.

Theme: **Breakfast**

Lesson: **Too Much Sugar!**

OBJECTIVE

Participants will:

- Identify breakfast foods that are higher and lower in added sugars

MATERIALS

- Empty box of a high-sugar cereal (contains 8 grams or more of total sugars per serving)
- Empty, clean carton of chocolate milk
- 1-cup measuring cup
- 1/3 cup of sugar in a small bag or container
- Teaspoon measuring spoon
- Dark-colored plate
- *GO Breakfast Menus* handout (one per pair of participants)
- Pens or pencils (one per pair of participants)

PREPARATION

Calculate the number of teaspoons of sugars for the cereal and for the milk by dividing the number of grams in a serving by 4.

1. DEMONSTRATION AND DISCUSSION

A. Say or paraphrase the following:

Cereal with fruit and plain low-fat milk can be a healthy breakfast. Fruits are GO foods. But not all kinds of cereal and milk are GO foods. If cereal or milk contains a lot of added sugars, it's a WHOA food.

Today let's learn about sugar in cereal, milk, and other breakfast foods.

- B. Hold up the empty cereal box and the milk carton so participants can see the Nutrition Facts labels. Say or paraphrase the following:

On most food packages there's a Nutrition Facts label that gives you information about the food. One of the things you can find out is how much sugar the food contains. You look for the word "Sugars" and the amount. This is the amount of sugars that are naturally in the ingredients *and* the sugars that were added when the food was made in a factory.

Are some kinds of cereal sweeter than other kinds? (Yes) Are some kinds of milk sweeter than other kinds? (Yes) Which kinds? (Milk with flavors such as chocolate and strawberry) The sweeter kinds of cereal and milk usually contain more added sugars.

Let's look at the amount of sugars in one kind of cereal and in one kind of flavored milk.

- C. Use the measuring cup to show participants how much one serving of the cereal is. Tell them how many grams of sugars are in one serving. Measure out the equivalent number of teaspoons onto the plate, and show this amount to participants.
- D. Use the measuring cup to show participants how much one serving of the milk is. Tell them how many grams of sugars are in one serving. Measure out the equivalent number of teaspoons, and add this amount to the sugar already on the plate. Show the total amount to participants.
- E. Ask a few participants to comment on how much sugar is on the plate. Point out that this is the amount of sugar in only two foods *at one meal*. Say or paraphrase the following:

Think back to what we learned about your body being in or out of energy balance. If you eat *more* food than your body uses up, your body may get out of energy balance and over time you may gain too much weight. Eating a lot of foods with added sugars can cause this to happen.

There are others reasons not to eat too many foods that contain added sugars: They don't contain vitamins and minerals and other healthy things for your body. And they can cause cavities.

Nutritional Value of Fresh Produce

Content Standards

Grade 4

Science

Life Sciences 2

Mathematics

4.MD.4, 1.MP, 4.MP

Health Education

Nutrition and Physical
Activity 1.1.N, 6.1.N

Grade 5

Mathematics

5.MD.2, 5.G.2, 1.MP, 4.MP

Health Education

Nutrition and Physical
Activity 1.2.N, 1.6.N,
3.2.N, 5.1.N

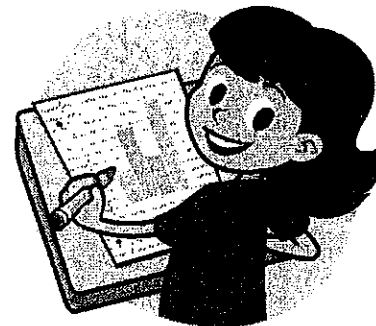
Grade 6

Mathematics

6.SP.5b, 1.MP, 4.MP

Procedure

1. Distribute copies of the *Fresh Fruits and Vegetables Nutrition Facts* handout to individual students or small groups of two or three. Review one Nutrition Facts label with the class to make certain that students understand how to read them. Using an overhead transparency of the handout may be helpful.
2. Distribute copies of the bar graph worksheets. Review the procedure for making bar graphs. You may wish to make an overhead of a blank graph to use in your explanation of bar graphing. Remind students that all graphs contain the following:
 - ▶ labels for the vertical axes
 - ▶ a title
 - ▶ evenly divided horizontal and vertical axes
 - ▶ accurate data
3. Have students complete the bar graphs.
4. Distribute and discuss the *Nutrient Comparison* worksheet. Instruct students to use their bar graphs to complete the worksheet. Discuss the answers.



Variations

- ▶ Have students create their own bar graphs on graph paper. Instruct them to label the x- and y-axes, determine appropriate increments, and give their graph a title.
- ▶ Have students create large nutrition pictographs or bar graphs for posting or display in the school cafeteria or library.

Extensions

- ▶ Have a tasting party of the fruits and vegetables you have studied. Ask the students to make a survey of the most popular fruits and vegetables among the class members and prepare graphs that display the results of the survey.
- ▶ Visit www.harvestofthemonth.cdph.ca.gov/EdCorner/nutrition-labels.asp to access nutrition labels for a variety of fresh produce items. Have students graph additional nutrients for different fruits and vegetables.

Fruits and Vegetables Nutrition Facts

Potatoes

Nutrition Facts

Serving Size: ½ cup baked potato (61g)

Calories 57

Calories from Fat 0

% Daily Value

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 3mg 0%

Total Carbohydrate 13g 4%

Dietary Fiber 1g 4%

Sugars 1g

Protein 1g

Vitamin A 0% Calcium 0%

Vitamin C 13% Iron 1%

Tomatoes

Nutrition Facts

Serving Size: ½ cup tomatoes, sliced
(90g)

Calories 16

Calories from Fat 0

% Daily Value

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 4mg 0%

Total Carbohydrate 4g 1%

Dietary Fiber 1g 4%

Sugars 2g

Protein 1g

Vitamin A 15% Calcium 1%

Vitamin C 19% Iron 1%

Fruits

Apples

Nutrition Facts

Serving Size: ½ cup apples, sliced (55g)

Calories 28

Calories from Fat 0

% Daily Value

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 1mg 0%

Total Carbohydrate 8g 3%

Dietary Fiber 1g 5%

Sugars 6g

Protein 0g

Vitamin A 1% Calcium 0%

Vitamin C 4% Iron 0%

Pears

Nutrition Facts

Serving Size: ½ cup pears, sliced (70g)

Calories 41

Calories from Fat 0

% Daily Value

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 1mg 0%

Total Carbohydrate 11g 4%

Dietary Fiber 2g 9%

Sugars 7g

Protein 0g

Vitamin A 1% Calcium 1%

Vitamin C 5% Iron 1%

Strawberries

Nutrition Facts

Serving Size: ½ cup strawberries (72g)

Calories 23

Calories from Fat 0

% Daily Value

Total Fat 0g 0%

Saturated Fat 0g 0%

Trans Fat 0g

Cholesterol 0mg 0%

Sodium 1mg 0%

Total Carbohydrate 6g 2%

Dietary Fiber 1g 6%

Sugars 4g

Protein 0g

Vitamin A 0% Calcium 1%

Vitamin C 71% Iron 2%

Fresh Fruits and Vegetables Nutrition Facts

Grapes

Nutrition Facts

Serving Size: ½ cup grapes (76g)
Calories 52 Calories from Fat 0

% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 2mg	0%
Total Carbohydrate 14g	5%
Dietary Fiber 1g	3%
Sugars 12g	
Protein 1g	
Vitamin A 1%	Calcium 1%
Vitamin C 14%	Iron 2%

Oranges

Nutrition Facts

Serving Size: ½ cup orange, sections
(90g)
Calories 42 Calories from Fat 0

% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 11g	4%
Dietary Fiber 2g	9%
Sugars 8g	
Protein 1g	
Vitamin A 4%	Calcium 4%
Vitamin C 80%	Iron 1%

Peaches

Nutrition Facts

Serving Size: ½ cup peach, sliced (77g)
Calories 30 Calories from Fat 0

% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 7g	2%
Dietary Fiber 1g	5%
Sugars 7g	
Protein 1g	
Vitamin A 5%	Calcium 1%
Vitamin C 9%	Iron 1%

Plums

Nutrition Facts

Serving Size: 1 medium plum (66g)
Calories 30 Calories from Fat 2

% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 8g	3%
Dietary Fiber 1g	4%
Sugars 7g	
Protein 0g	
Vitamin A 5%	Calcium 0%
Vitamin C 10%	Iron 1%

Watermelon

Nutrition Facts

Serving Size: ½ cup watermelon, cubed
(76g)
Calories 23 Calories from Fat 0

% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 1mg	0%
Total Carbohydrate 6g	2%
Dietary Fiber 0g	1%
Sugars 5g	
Protein 0g	
Vitamin A 9%	Calcium 1%
Vitamin C 10%	Iron 1%





California Foundation for
Agriculture in the Classroom

Fresh Fruits and Vegetables Nutrition Facts

Vegetables

Broccoli

Nutrition Facts

Serving Size: ½ cup cooked broccoli
(78g)

Calories 27	Calories from Fat 0
% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 32mg	1%
Total Carbohydrate 6g	2%
Dietary Fiber 3g	10%
Sugars 1g	
Protein 2g	
Vitamin A 24%	Calcium 3%
Vitamin C 84%	Iron 3%

Carrots

Nutrition Facts

Serving Size: ½ cup carrots, sliced (61g)
Calories 25 Calories from Fat 0

% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 45mg	2%
Total Carbohydrate 6g	2%
Dietary Fiber 2g	7%
Sugars 3g	
Protein 1g	
Vitamin A 204%	Calcium 2%
Vitamin C 6%	Iron 1%

Corn

Nutrition Facts

Serving Size: ½ cup yellow corn (82g)
Calories 89 Calories from Fat 9

% Daily Value	
Total Fat 1g	2%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 0mg	0%
Total Carbohydrate 21g	7%
Dietary Fiber 2g	9%
Sugars 3g	
Protein 3g	
Vitamin A 4%	Calcium 0%
Vitamin C 9%	Iron 2%

Green Beans

Nutrition Facts

Serving Size: ½ cup green beans, fresh
(50g)

Calories 16	Calories from Fat 0
% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 3mg	0%
Total Carbohydrate 3g	1%
Dietary Fiber 1g	6%
Sugars 2g	
Protein 1g	
Vitamin A 7%	Calcium 2%
Vitamin C 10%	Iron 3%

Spinach

Nutrition Facts

Serving Size: 1 cup fresh spinach (30g)
Calories 6 Calories from Fat 0

% Daily Value	
Total Fat 0g	0%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 24mg	1%
Total Carbohydrate 1g	0%
Dietary Fiber 1g	2%
Sugars 0g	
Protein 1g	
Vitamin A 56%	Calcium 3%
Vitamin C 14%	Iron 4%

Sweet Red Peppers

Nutrition Facts

Serving Size: ½ cup sweet red peppers,
chopped (75g)

Calories 23	Calories from Fat 1
% Daily Value	
Total Fat 0g	1%
Saturated Fat 0g	0%
Trans Fat 0g	
Cholesterol 0mg	0%
Sodium 3mg	0%
Total Carbohydrate 5g	2%
Dietary Fiber 2g	6%
Sugars 3g	
Protein 1g	
Vitamin A 47%	Calcium 1%
Vitamin C 158%	Iron 2%

Instructions: Using the graphs or labels provided, answer the questions below. As you complete the worksheet, think of why eating a wide variety of foods benefits your health. In this activity, categorize tomatoes as vegetables, even though they are scientifically fruits.

1. Which fruit contains the highest Percent Daily Value of vitamin A? _____

2. Which vegetable contains the highest Percent Daily Value of vitamin A? _____

3. Which fruit or vegetable contains the lowest Percent Daily Value of vitamin A? _____

4. Which fruit contains the highest Percent Daily Value of vitamin C? _____

5. Which vegetable contains the highest Percent Daily Value of vitamin C? _____

6. Which fruit or vegetable contains the lowest Percent Daily Value of vitamin C? _____

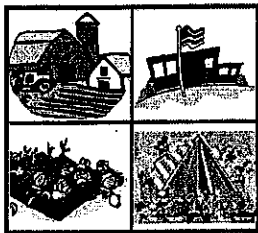
7. List some fruits and vegetables that are higher in fiber than others.



8. Find two fruits and two vegetables that are high in both vitamin A and vitamin C and list them.

9. Which way is easier for you to compare nutritional value of the fruits or vegetables—the labels provided or the graphs you made? _____ Why? _____

10. From the nutrient information provided, nominate one fruit or vegetable to be the "Best Produce" award winner. What fruit or vegetable did you choose? _____



Eating Healthy

Activity 1

Take a Look at Milk Fat

Supplies

- Cooking oil
- Glass
- Water
- Crackers
- Knife
- One quart- size canning jar with a lid
- Medium size bowl
- Plastic spoon or a spatula
- One-half pint of heavy whipping cream
- Blender (optional)
- *MyPyramid for Kids* poster, Lesson 1, page 15
- Pictures of milk products, pages 15 - 16 (or cutouts from grocery store ads)
- Tape

Prep

- Keep cream cold until ready to use.

Note:

If you are unable to make butter by shaking, use a blender. Pour whipping cream into a blender jar, put the lid on tight and turn on the blender using "whip" setting. After a few minutes of whipping, the cream will turn into clumps of butter and buttermilk.

Introduction

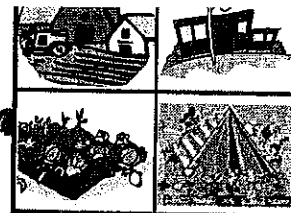
Milk is an animal product that contains animal fats. Over consumption of animal-fats is not healthy for your heart. This activity introduces the concept of milk-fat. The children will get to see the fat component of milk by making butter. The activity reinforces what the children have learned about the milk group on *MyPyramid for Kids*, the importance of calcium, and the message "Go low-fat or fat-free" and "Better at the Bottom".

Directions

1. Fat and water don't mix.
 - Tell the children they are going to learn about milk fat.
 - Ask the children if they have seen oil and water mixed together.
 - Demonstrate by pouring some oil in a glass of water. Ask the children to share what they observe. (*Oil floats to the top.*) Oil (fat) and water don't mix.
 - Explain after a cow is milked, if the milk is left to stand for a while cream will rise to the top. Ask the children why they think this happens. (*Fat separates and floats to the top.*) Explain that dairy farmers skim off (remove) the top layer and sell it as cream. Products made from cream have a higher amount of fat. (Examples: half and half, whipping cream, heavy whipping cream and butter.)
2. Make butter.
 - Explain that the children will make butter from the cream that was skimmed from the milk.
 - Pour chilled, heavy whipping cream into a clear jar. Fill the jar half full.
 - Put the lid tightly on the jar and shake the jar up and down.
 - Have the children take turns shaking the jar.
 - Continue shaking until the cream starts to thicken. It will get thick and coat the inside of the glass jar, but continue shaking.
 - As the cream begins to turn to butter, it will become less thick and lumps of butter will begin to form. Stop shaking and observe.
 - Pour the butter and the buttermilk into a bowl.
 - Press the butter up against the side of the bowl with a spoon to squeeze out the remaining buttermilk. Pour off the buttermilk and



From Farm to Fork



California Second Grade Content Standards

Science

Physical Sciences 1a; 1c
Investigation and
Experimentation 4a; 4b; 4c
4g

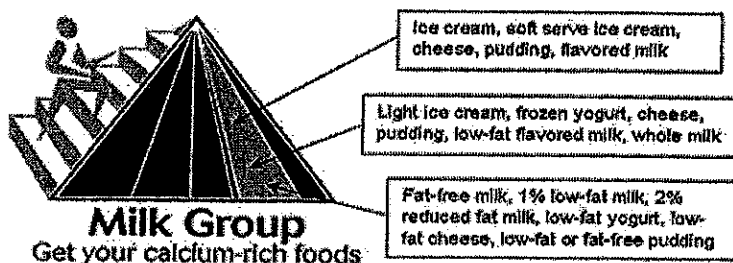
Mathematics

Number Sense 1.3
Statistics, Data Analysis,
and Probability 1.4

English - Language Arts

Listening and speaking 1.1;
1.2; 1.4
Writing 1.1; 1.2; 2.1

- rinse the remaining butter with cold water. Pour off the water. The white lump in the bowl is butter.
- Discuss why high fat and high sugar foods should only be eaten in small amounts. (*Heart health, excess calorie intake, etc.*)
 - Provide crackers and allow the children to taste the butter if they would like.
3. Discuss the observations.
- Ask why the fat separated.
 - Ask if the butter made in class the same as the butter at home? (*Commercial butter generally has salt and yellow coloring added*).
 - Butter is mostly made of milk-fat. Butter is about 80% fat and it contains little calcium or protein. What could happen if people eat too much butter or fat? (*It can cause plaque to build up in our hearts and arteries.*)
 - Ask the children to describe or write a simple 3-4 steps recipe for making butter.
4. Show the children the MyPyramid for Kids poster.
- Ask the children to point to the Milk group on *MyPyramid for Kids*, and review the color and size. (It is the blue group.)
 - Ask the children why we need foods from the Milk group every day.
 - Emphasize that milk contains the mineral calcium that makes strong bones and teeth. Write the word *calcium* on the board.
 - Ask the children why the blue stripe is broad at the bottom and narrow at the top. (*The milk product choices at the bottom are healthier than those at the top because they have less fat and less added sugar.*)
 - Have the children sort the milk group foods (pages 15-17) according to which belongs towards the top of the MyPyramid and which at the bottom. Emphasize "Better at the Bottom".
5. Review the lesson.
- What is the name of the mineral found in Milk group foods? What does it do for our bodies?
 - What did we learn about fat and water?
 - What did we learn about cream and milk?
 - Which milk group foods are higher in fat and which are lower?



- Read *Oliver's Fruit Salad*
- Discuss the story and why we should eat some fruit every day
- Demonstrate the difference between a fruit drink and 100% fruit juice

Materials

- *Oliver's Fruit Salad* by Vivian French
- Orange, juicer, measuring cups and spoons, knife, cutting board or plate, clear plastic cup, sugar, water, orange food coloring, labels from 100% juice

Activity

After reading *Oliver's Fruit Salad*, ask the children the following questions:

1. What kind of fruit did Oliver's grandpa grow? ***His Grandpa grows apples, grapes, pears, cherries, strawberries and plums.***
2. Which fruit did his mother buy that his Grandpa did not grow? ***She bought a pineapple.***
3. Why didn't Oliver want to eat any of the fruit his mom bought at the store? ***Because Oliver had not eaten any of the fruit that his Grandpa grew.***
4. What did Oliver and his Grandma make together? ***They made a fruit salad.***
5. What are some of your favorite fruits? Point out that eating a variety of colorful fruits everyday helps keep them healthy (they contain Vitamins A and C two very important vitamins).

Vitamin A

Health Benefits: Helps your vision and makes your skin healthy

Vitamin C

Health Benefits: Helps your body fight off infections like colds

6. Do you like your fruit cut up or whole? Have you ever had a fruit salad?
7. Have you ever had a frozen fruit popsicle? Explain that they will be making one from fresh melon and 100% juice.
8. Do you drink fruit juice? **Demonstrate the difference between a fruit drink and 100% fruit juice-** (see attached instructions). Encourage children to drink 100%

LESSON FOUR: FABULOUS FRUITS

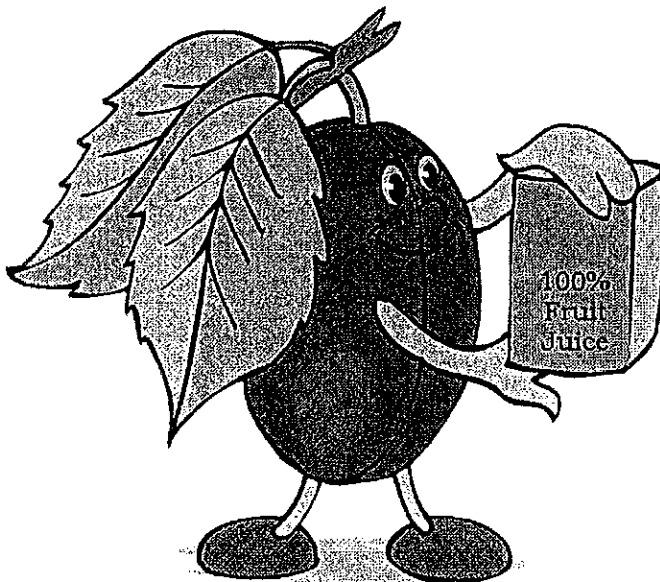
ACTIVITY THREE: Fruit Juice versus Fruit Drink

1. Juice an orange. Pour into a glass. Explain that this juice is made only from the fruit. It is referred to as 100% fruit juice.
2. Explain that there are also fruit drinks. Demonstrate how to make a fruit drink:
 - Mix $\frac{1}{2}$ cup water with $\frac{1}{4}$ cup sugar
 - Add 1 tablespoon of the orange juice
3. Ask the children which drink is healthier and why.
4. Ask the children if they know how people can tell if they are buying 100% fruit juice or a juice drink. Show them the label from a 100% juice and a juice drink.
5. If time permits, have the children try juicing their own orange.

Supplies Needed

- Oranges
- Hand juicer
- Measuring cups and spoons
- Knife
- Cup(s)
- Sugar
- Water
- Labels from 100% fruit juice and fruit drinks

Tip: Add a drop of orange food coloring to the sugar and water solution to demonstrate how manufacturers also add artificial coloring to their fruit drinks.



“bad.” There’s no such thing as a “bad” food. But should you eat some foods more often than others? (Yes) Which kinds of cereal, milk, and other breakfast foods should you eat more often? (Ones that don’t contain a lot of added sugars)

2. BREAKFAST MENU

- A. Ask participants to name other breakfast foods and drinks that contain a lot of added sugars. As needed, supply the following:

Doughnuts	Pancake syrup	Sweet rolls
Fruit-flavored drink	Some kinds of muffins	Jelly

- B. Ask participants to name GO breakfast foods and drinks that *don’t* contain a lot of added sugars. As needed, supply the following:

Corn or whole-wheat tortilla with beans without salt or fat
Plain (unflavored) low-fat or fat-free milk and yogurt
Low-sugar cereals, such as oatmeal or shredded wheat
Whole-wheat bread and toast
100% fruit juice
Fruit smoothie
Fruit

- C. Divide participants into pairs. Pair older participants with younger ones. Give each pair a GO *Breakfast Menus* handout and a pen or pencil. Tell them to create two menus of breakfast foods that are low in added sugars. [**Alternative:** If you’re unable to make copies of the GO *Breakfast Menus* handout, participants can write their menus on blank sheets of paper.]
- D. Congratulate participants on their menus. Encourage them to look at the Nutrition Facts labels on cereal, milk, and other foods to find out the amount of sugars they contain. Tell them it’s best to eat foods with low amounts of added sugars most of the time.