

February POM Lesson Plan Grades 4 or 5

Introduction

Introduce yourself.

Ask students if they remember last month's POM (mandarin). Ask them how they liked it and if they had any throughout the month at home.

Also ask if they tried the recipe in their parent newsletter.

Nutrition Component

Objectives

- Learn that fruits and vegetables come in a variety of forms and colors.
- Learn about different sections of the supermarket.

Supplies Needed

- "Grocery Shopping List" Worksheet
- Grocery Store Map
- School Lunch Menu

Background

Review resources at www.idph.state.ia.us/pickabettersnack/the_color_way.asp

Eating fruits and vegetables along with an overall healthy diet can reduce the risk of some chronic diseases. It is important to choose a variety of fruits and vegetables each day and include fruits and vegetables from each of the five color groups (blue/purple, green, white, yellow/orange, and red) because individual fruits and vegetables contain different nutrients.

Different forms: In the fruit group, consumption of whole fruits (fresh, frozen, canned and dried) rather than fruit juice for the majority of the total daily amount is suggested for adequate fiber intake. In the vegetable group, vegetables may be eaten raw or cooked; fresh, frozen, canned or dried/dehydrated.

Variety of colors: MyPyramid uses different colors to identify food groups. Within the fruit and vegetable groups, color is also important. Dark green and orange vegetables are particularly nutritious, for example. We focus on the variety of color within the fruit and vegetable food groups. For young children, the messages are:

- Eat more fruits and vegetables for snacks, and
- Eat a variety by choosing different colors each day.

For older children, it may be appropriate to begin talking about the five sub-categories of vegetables: dark green, orange, dry beans and peas, starchy, and others. Information can be found at www.MyPyramid.gov. The new USDA Food Guide, MyPyramid, uses a personalized approach based on individual calorie needs to determine the amount of fruits and vegetables to eat daily. Recommendations are given in cups rather than servings.



	Activities for this lesson were selected from "There's a Rainbow on My Plate," developed by the Produce for Better Health Foundation.			
Do the Activity:	Pass out the "Grocery Shopping List" (p. 7) worksheet. Either assign or have individuals or small groups choose a fruit and a vegetable. In four minutes, have the students write down all of the different forms that they can think of at a grocery store.			
	At the end of four minutes, share food items and various forms. Add lists as needed while discussing. Make sure they know the five different forms: fresh, frozen, canned, dried or juice.			
	Where would you find these food items? Put a copy of the grocery store map (p. 10) on a transparency, on butcher paper, on marker board, or on a bulletin board. Have students locate and place all foods from their lists. Share. Review that fruits and vegetables come in a variety of forms in the grocery store. Ask: Which form do you think would be the most nutritious? Which would be the easiest to eat?			
Apply:	Look at the school lunch menu for the week. Have the students tell whether the fruit and vegetable items are canned, fresh, frozen, or dried. CCSD lunch menus may be accessed at http://ccsd.net/foodservice/1-Menus.html			
	Have the students name the color groups where the menu items fit.			
	Ask students to share their favorite canned, frozen, fresh, and dried fruit or vegetable.			
Produce of the Month Component				
Objectives • Learn the health value of broccoli. • Learn the origin of broccoli and different ways to eat it.	Background Broccoli has been grown for over 2000 years. Romans prized broccoli and by the 16th century it was eaten by families in France and Italy. Thomas Jefferson noted the planting of broccoli in his family garden in the late 1700's but it didn't become widely known until the turn of the 20th century.			
Supplies NeededFebruary POM parent newslettersFresh head of	Ninety-eight percent of the broccoli crop is grown in California. Two brothers, Stefano and Andrea D'Arrigo from Messina, Italy, arrived in the U.S. in the early 1900's. In 1922, they started their own produce company in San Jose, California. They were the first commercial			



broccoli, empty bag of frozen broccoli*, old head of broccoli, etc.

- Pre-washed and cut broccoli florets for each student to taste
- Low fat ranch dressing
- Small paper plates
- Napkins
- Plastic serving gloves
- Anti-bacterial gel

*You can empty a bag of frozen vegetables, rinse it out, and stuff it with old wadded papers. Tape it shut and it will look like the real thing.

growers in the West to successfully raise and ship box loads of broccoli. Their broccoli was developed from seeds sent from Italy by their father. They created a distinctive brand name for their broccoli – "Andy Boy" – and put a photo of Stefano's two-year- old son, Andrew, on the label. Theirs was the first fresh produce company in the U.S. to use a brand name on their advertising. (Harvest of the Month, February 2006)

Over 30,000 plants can grow in only one acre of land! WOW! A field may be harvested two to three times to remove all of the broccoli. Ideally, broccoli should be harvested during the cooler months in order to ensure the longest storage time. It should be cut with eight to 10 inches of stem left intact and the heads should be cooled immediately to prevent opening and discoloration. Broccoli may be packed in the field or transported to a processing facility where it is cut and packaged.

Broccoli is called the crown jewel of nutrition because it is so rich in vitamins and minerals. It has calcium and vitamins C and A. Half of a pound of broccoli has more vitamin C than two and a half pounds of oranges or 204 apples.

The word broccoli comes from the Italian "brocco" meaning arm branch. Broccoli is a member of the Cruciferae family which means it's related to cabbage, cauliflower and Brussels sprouts. There are two types of broccoli: sprouting/Italian broccoli (Brassica Oleracea Italica) the most common, and heading broccoli (Brassica Oleracea) which looks like cauliflower. The broccoli we eat is the flower of the broccoli plant. Other vegetables that are flowers include cauliflower and artichokes.

Talk It Over: Be Picky in the Aisle

As a class make a list of ways broccoli can be used to make snacks and family meals.

Be Picky in the Aisle!

Suggest students go with an adult to a grocery store or look closely at a bunch of broccoli in their refrigerator at home. Show family members how much they have learned about broccoli by teaching them how to choose the most nutritious broccoli available!

 Choose bunches that are dark green. Florets that are dark green, purplish, or bluish green contain more beta-carotene (turns into vitamin A) and vitamin C than paler or yellowing ones.



• Choose bunches with stalks that are very firm. Stalks that bend or seem rubbery are of poor quality.

 Avoid broccoli with open, flowering, discolored, or watersoaked bud clusters and tough, woody stems.

(Harvest of the Month, February 2006)

Ask your produce manager if they would save a sample of "old" broccoli for you to compare with the broccoli used in the taste test.

Taste Opportunity

Produce of the Month reminds you that it is easy to eat vegetables as snacks.

Have the students wash their hands. Cut broccoli into bite sized florets. Give each student a small amount of a low-fat Ranch Dressing. Taste broccoli without dipping into the dressing first, then taste with dressing.

What would you do (with adult help) to broccoli to get it ready to eat as a snack?

Broccoli – Wash. Eat. (How easy is that?)
Broccoli – Wash. Dip. Eat. (How easy is that?)

Physical Activity Component

Objectives

- Assess daily physical activity level.
- Demonstrate physical activity.

Supplies Needed

- "Time Table" worksheet
- Index cards with sports skills and hat to pick them out of

Background

Healthy habits we learn as children can become lifelong habits that affect our well being later in life. Physical activity plays an important part in building strong bones and muscles. It also helps keep bodies healthy and prevents diseases later in life, such as heart disease and cancer. Having fun with physical activity while at a young age will encourage continued physical activity resulting in a healthy active lifestyle.

Brains need lots of oxygen. This need is satisfied with adequate heart and lung development (which is done through physical activity). Unfortunately, less than half of all children exercise enough to develop a healthy heart and lungs.

Physical activity has a host of health benefits.¹

- Strengthens the heart
- Strengthens muscles and bones
- Increases energy (to play longer)
- Allows performance of more work with less effort (carry my toys without becoming tired or needing help)



- Reduces stress and tension (get along better with others)
- Improves ability to learn (get homework done faster)
- Increase self-confidence and self-esteem (greater social opportunities)

Elementary age students should be active 60 minutes most days of the week. Being active as a child will make it easier to be active when they are adults. Physical activity is essential for a happy, healthy lifestyle.

¹National Association for Sport and Physical Education, Physical Best Activity Guide, Elementary Level

Do the Activity: PA Chart

Ask students to describe a physically active person. Make a list on the board and have a discussion on the differences between a physically active person and a sedentary person.

Ask students if they remember how much physical activity a student their age should have each day. Fill in the chart on page 8 with activity throughout a typical 24 hour day during the school week.

Example:

Time	Physical	Sedentary	List the Activity
12:00 A.M. (Midnight)		✓	Sleeping
10:00 A.M.		✓	Math Class
4:00 P.M. Example	✓		Play Outside
6:00 P.M. Example		✓	Eating Dinner

Discuss the differences between physical activity and sedentary behavior. Have students check to see if they get one hour of physical activity a day.

Make suggestions for getting more physical activity. (e.g. walking to school, playing outside during recess and after school, etc.)
Remember, the time you are active during physical education class counts for part of the hour a day. Have students write a plan to get one hour of activity each day.



Apply:	Teacher calls out the following sports skills to mimic (or write them down on individual index cards and pick them out of a hat): Shooting a jump shot Running through tires Batting a baseball Serving a tennis ball Downhill skiing Spiking a volleyball Swinging a golf club Throwing a football Juggling a soccer ball Shooting an arrow Shooting an arrow Shooting a hockey puck Swimming underwater Fielding a ground ball and throwing it to first base Dunking a basketball Do each sport skill for 30 seconds
	Sports Galore adapted from Activity Promotion Laboratory School of Health and Human Performance, East Carolina University
Talk It Over:	Ask the students: What is the definition of physical activity? Ask students to identify examples of physical activity from Sports Galore (above) and other class examples. What are some other non-traditional sports related activities?
	Jump rope, going to the park, playing tag, Red Rover, Simon Says What are some activities you could do at home after school?



Grocery Shopping

Directions:

Your teacher will provide a specific fruit or vegetable, or you may choose one.

On the grocery bag, you (or your team) will have four minutes to write down as many forms of the fruit or vegetable that you could find in a grocery store.

Wait until your are told to start.



Source: Grocery Shopping Worksheet, IDPH Pick a Better Snack & ACT, http://www.idph.state.ia.us/pickabettersnack/common/pdf/oct 4 5 lessons.pdf



Activity Time Table: Sedentary or Physical?

Activity on a Typical Day During the School Week				
Time	Check Ac	tivity Type		
	Physical √	Sedentary $\sqrt{}$	List the Activity	
12:00 a.m. (midnight)				
1:00 a.m.				
2:00 a.m.				
3:00 a.m.				
4:00 a.m.				
5:00 a.m.				
6:00 a.m.				
7:00 a.m.				
8:00 a.m.				
9:00 a.m.				
10:00 a.m.				
11:00 a.m.				
12:00 p.m. (noon)				
1:00 p.m.				
2:00 p.m.				
3:00 p.m.				
4:00 p.m.				
5:00 p.m.				
6:00 p.m.				
7:00 p.m.				
8:00 p.m.				
9:00 p.m.				
10:00 p.m.				
11:00 p.m.				
Number of physical activity hours on a typical day during the week		a typical day	Subtract hours of physical activity from 24 hours per day to calculate number of sedentary hours	

Source: KWL Chart, IDPH Pick a Better Snack & ACT, http://www.idph.state.ia.us/pickabettersnack/common/pdf/nov-4-5-lessons.pdf

Grocery Store Map



Frozen

Boxes and Bags

Canned

Canned

)airy

Meat/Fish

Fresh Produce