January - Lesson Plan Grades 4-5

MY PYRAMID

Objectives

Identify foods in the meat and beans group.

Calculate how much of various food groups are needed to meet the MyPyramid for Kids recommendations.

Analyze food choices from fast food restaurants, choosing lower fat alternatives.

Supplies Needed

January
Pick a **better** snack™ & **ACT** scorecard

4th Grade – "Food Math" worksheet

5th Grade – "Where's the Fat?" worksheet

Paper and pencils

Glass measuring cup, cut raw fruits or vegetables to fill measuring cup to 1-cup line

Paper plate

Note to teachers

In the fall lessons, Pick a **better** snack the Color Way was the key message. For the months of December through February the focus will be on Pick a **better** snack™ & **Act** for the fruit, vegetable, and physical activity lessons. In addition there will be one lesson each month on MyPyramid for Kids. This lesson will allow children to explore the new colorful kid's pyramid that was released in the fall of 2005.

USDA's Team Nutrition created classroom lessons to help children explore MyPyramid for Kids. They are available on the web at www.mypyramid.gov/kids. A classroom kit to accompany the lessons can be ordered. The MyPyramid lessons are to be used in the following order:

Level 1 Lessons (grades 1 and 2)
- **Introduction**
- **Lesson 1** (use in December)
- **Lesson 2** (use in January)
- **Lesson 3** (use in February)

Level 2 Lessons (grades 3 and 4)
- **Introduction**
- **Lesson 1** (use in December)
- **Lesson 2** (use in January)
- **Lesson 3** (use in February)

Level 3 Lessons (grades 5 and 6)
- **Introduction**
- **Lesson 1** (use in December)
- **Lesson 2** (use in January)
- **Lesson 3** (use in February)

Each lesson provides curriculum connections and descriptions of student skills. There are lunchroom links, suggestions for home connections and ready-to-print activity sheets.

Teachers can tour the adult version of MyPyramid. www.mypyramid.gov.

Background

MyPyramid for Kids tells how much of each food group to eat; MyPyramid for Kids gives the amounts for each day in ounces and cups. Grains and meats are weighed in ounces.

Pick a **better** snack™ campaign was developed by the Iowa Nutrition Network partners with funds from USDA's Food Stamp and Team Nutrition programs. Pick a **better** snack & Act lessons are provided by the Iowa Department of Public Health with funding from Food Stamp Nutrition Education and CDC's Nutrition and Physical Activity Division with additional support from Iowa State University Extension. To view additional campaign materials, go to www.idph.state.ia.us/pickabettersnack.

For example, a piece of bread is 1 ounce, so is a cup of ready-to-eat breakfast cereal or one small tortilla. A small chicken breast half is 3 ounces. Vegetable, fruit, and milk amounts are given in cups. For example, one small apple, about 12 baby carrots, and an 8-ounce glass of milk count as 1 cup equivalent.

You may want to help students understand what 1 cup of vegetables or fruit looks like. Put food in a measuring cup, and then pour out onto a paper plate. Ask students to estimate how many fruits and vegetables they eat in a typical day. Point out that most students their age should eat more foods from these food groups. They are high in nutrients.

Ask students to share what they ate for dinner yesterday. Let several students respond. Point out that many students started by naming a food that is a member of the meat and beans group – chicken, hamburger, fish.

Tell students that these are foods that contain protein. Challenge students to list as many foods as they can from this food group.

Did students list the plant foods that are part of this group – dry peas and beans*?* (black beans, chickpeas, falafel, kidney beans, lentils, lima beans, navy beans, pinto beans, soy beans, split peas, tofu, white beans) Nuts and seeds? (almonds, cashews, hazelnuts, mixed nuts, pecans, pistachios, pumpkin seeds, sesame seeds, sunflower seeds, walnuts) Peanuts and peanut butter? Point out that these foods are major sources of protein and calories in many cultures.

Tell students that all these foods include protein. Scientists sometimes call protein the building block for bones, muscles, cartilage, skin, and blood.

Point out that most people get enough of these foods. One of the challenges is choosing foods from this group that are lower in fat.

Web Site Resources

www.idph.state.ia.us/pickabettersnack
www.fruitsandveggiesmorematters.org
www.mypyramid.gov/kids/index.html

Do the Activity:
4th Grade
Food Math

Food Math - Have students work in pairs. Hand out the Food Math worksheet. Tell students they are going to choose foods they think would make a healthy menu for a day for Jason. Their menu should include breakfast, lunch, dinner and a snack.

The menu they create must include the right amount of food from all the food groups. For one day, that would be: 6 ounces of grains, 2 ½ cups vegetables, 1 ½ cups fruit, 3 cups milk, and 5 ounces of meat or beans. (Amounts are based on 1800 calories, the estimated energy requirement for a moderately active 9- to 10-year-old.) Before students begin, review each of the food groups and the amounts needed.

5th Grade
Where's the Fat?

Where's the Fat? Hand out the Where's the Fat? Worksheet. Tell students that it includes information about fat found in many meat and bean foods. Point out that while they probably don't decide what their family is going to eat for dinner, students may select what they eat when their family eats out. Some of their favorite meat and bean foods may be very high in fat.

Tell students that nearly all chain restaurants have nutrition information available. They can ask for information before making their choice. These websites have nutrition information available:

McDonalds www.mcdonalds.com

Burger King www.bk.com

Taco Johns www.tacojohns.com

Taco Bell www.tacobell.com

Subway www.subway.com

Have students answer the questions at the bottom of the worksheet and share ways they can make low fat choices.

Talk It Over:
4th Grade

Ask the students how their diets compare to Jason's. Do they eat more or less grains? Fruit? Vegetables? Milk? Meat and beans? Did Jason's food choices include a variety of fruits and vegetables?

5th Grade	Have the students share ways they could make lower-fat choices when eating out.
Apply:	Have the students write one personal goal describing how they could meet the recommendations on MyPyramid. Share a few to the class. Distribute January Pick a better snack™ & **ACT** scorecards. Review with the students that when they eat one of these foods, or do one of the activities in the pictures, they can put an "X" through it. On the back of the Pick a **better** snack™ & **ACT** scorecard for each month, there is information for the students. Have the students take the scorecard home and encourage them to try the snack idea at home.

Art, Music & PE

Be Hip-Hop Healthy - Divide students into groups. Have each group write a rap (at least eight lines long) about the importance of eating from all the food groups. Have the group come up with movements that go along with their rap. Groups should perform their raps for the entire class. Then post a written copy of the rap on your bulletin board.

Language Arts & Reading

Many chain restaurants provide nutrition information for all the foods on their menus. This information is usually available online or at the restaurants. Have students collect this information from the chain restaurants where they eat. Divide students into groups. Each group will have nutrition information from one restaurant. Have each group prepare a short presentation to the class on smart choices from that restaurant's menu.

Math

Have students review the school lunch menu. Find all the protein choices, including proteins from plant foods. Encourage them to make signs, using charts and graphs that highlight lean protein choices to advertise to other students.

Science & Health

Have students visit MyPyramid.gov. Using the instructions on the site, have students determine their own MyPyramid Plan, entering their individual age, sex and activity level. Then have them print out their own MyPyramid worksheet.

Social Studies

Compare similarities and differences of protein sources eaten in different cultures.

Name: _____

MyPyramid FOR KIDS

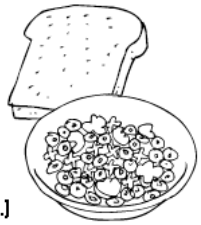
Food Math

Jason is 9 years old. He's physically active sometimes. Each day, he needs to eat:

Grains	Vegetables	Fruit	Milk	Meat and Beans
6 ounces	2½ cups	1½ cups	3 cups	5 ounces

Help Jason decide what to eat today. Plan breakfast, lunch, dinner, and a snack. Be sure he gets all the food he needs from each group. (Food items may be selected more than once.)

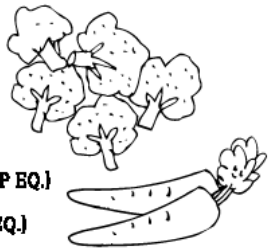
Grains 6 ounces



___ 1 slice whole-wheat toast* (1 OZ EQ.)
___ 5 whole-wheat crackers* (1 OZ EQ.)
___ 1 slice white bread (1 OZ EQ.)
___ 1 slice whole-wheat bread* (1 OZ EQ.)
___ 1 cup whole-grain ready-to-eat breakfast cereal* (1 OZ EQ.)
___ ½ cup cooked brown rice* (1 OZ EQ.)
___ 1 cup cooked pasta (2 OZ EQ.)
___ 1 hamburger bun (2 OZ EQ.)
___ 3 cups lowfat popcorn* (1 OZ EQ.)

*Items marked with a * are whole-grain*

Vegetables 2½ cups

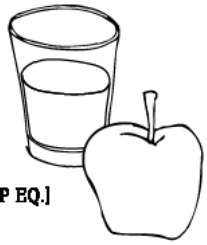


___ 6 baby carrots* (½ CUP EQ.)
___ 1 large ear of corn (1 CUP EQ.)
___ 1 medium baked potato (1 CUP EQ.)
___ 1 cup cooked greens* (1 CUP EQ.)
___ 1 large baked sweet potato* (1 CUP EQ.)
___ 3 spears broccoli* (1 CUP EQ.)
___ ½ cup tomato juice (½ CUP EQ.)
___ 1 cup chopped lettuce (½ CUP EQ.)

*Items marked with a * are dark green or orange vegetables*

Key: (1 OZ EQ.) means (equals 1 ounce equivalent)

Fruits 1½ cups



___ 1 small apple or ½ large apple (1 CUP EQ.)
___ 1 large orange (1 CUP EQ.)
___ 1 snack-sized container of peaches (½ CUP EQ.)
___ 1 large plum (½ CUP EQ.)
___ 1 small box raisins (½ CUP EQ.)
___ 1 cup 100% orange juice (1 CUP EQ.)
___ 1 medium wedge cantaloupe (½ CUP EQ.)
___ 1 small wedge watermelon (1 CUP EQ.)

Milk 3 cups

___ ½ cup lowfat or fat-free cottage cheese (¼ CUP EQ.)
___ 1 cup fat-free milk (1 CUP EQ.)
___ 1 snack-sized lowfat or fat-free yogurt (½ CUP EQ.)
___ 1 half-pint container 1% or 2% milk (1 CUP EQ.)
___ 2 ounces of lowfat or fat-free American cheese (1 CUP EQ.)
___ 1½ ounces of lowfat or fat-free cheddar cheese (1 CUP EQ.)
___ 1½ cups light ice cream (1 CUP EQ.)

Meat and Beans 5 ounces

___ 1 ounce of nuts (2 OZ EQ.)
___ 1 cup split pea soup (2 OZ EQ.)
___ 1 small chicken breast half (3 OZ EQ.)
___ 1 small lean hamburger (3 OZ EQ.)
___ 1 hard-boiled egg (1 OZ EQ.)
___ 1 tablespoon peanut butter (1 OZ EQ.)
___ ¼ cup of pinto beans (1 OZ EQ.)
___ 1 slice of turkey (1 OZ EQ.)

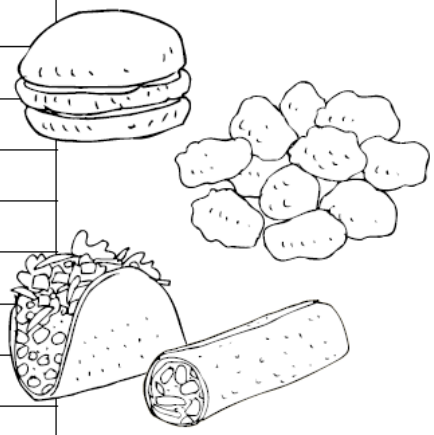
Name: _____

MyPyramid FOR KIDS

Where's the Fat?

Popular Fast Foods

Food	Total Fat (grams)
Hamburger	9
Quarter-pound hamburger	18
Fried fish filet sandwich	18
Crispy fried chicken	23
Chicken nuggets (10 pieces)	24
Beef soft taco without cheese	8
Beef taco, regular style, without cheese	7
Bean burrito, no cheese	8
Taco salad with ground beef, no cheese	39



1. How many grams of total fat are in a quarter-pound hamburger? _____

2. How many grams of total fat are in a regular hamburger? _____

3. Circle the food with less fat:

Taco salad OR Beef soft taco

Bean burrito OR Fried fish filet sandwich

Crispy fried chicken OR Hamburger

4. List three ways you can make lowfat choices when you're eating out.

1. _____

2. _____

3. _____

Name:

MyPyramid FOR KIDS

Where's the Fat? Answer Key

Popular Fast Foods

Food	Total Fat (grams)
Hamburger	9
Quarter-pound hamburger	18
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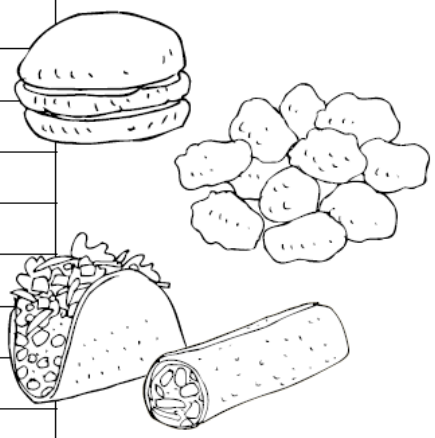

1. How many grams of total fat are in a quarter-pound hamburger? **Answer: 18 grams**

2. How many grams of total fat are in a regular hamburger? **Answer: 9 grams**

3. Circle the food with less fat:

Taco salad OR **Beef soft taco**

Bean burrito OR Fried fish filet sandwich

Crispy fried chicken OR **Hamburger**

4. List three ways you can make lowfat choices when you're eating out.

1. **Choose grilled *(not fried)***
2. **Choose the smaller size *(hamburger versus the quarter-pound hamburger)***
3. **Look at nutrition information provided by the restaurant before making your selection.**

January - Lesson Plan Grades 4-5

PHYSICAL ACTIVITY

Objectives

Know how to take your pulse.

Know what physical activity impacts heart rate.

Supplies Needed

January
Pick a **better** snack™ & **ACT** scorecard

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 you're young age will encourage continued physical activity resulting in a healthy, active lifestyle.

Our 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 get enough activity to develop a healthy heart and lungs.

The heart and lungs of an aerobically fit person are doing a good job of sending oxygen to muscles so they can exercise for longer periods of time, or in a child, so they can play longer without becoming tired.

Physical activity:

- Strengthens the heart (lowers resting and working heart rate, faster recovery)
- Reduces the risk of heart disease by improving blood circulation throughout the body
- Improves blood cholesterol levels
- Prevents and manages high blood pressure

Web Site Resources

www.idph.state.ia.us/pickabettersnack
www.mypyramid.gov/kids.index.html
www.americanheart.org

Do the Activity: Find Your Pulse

The heart is the strongest muscle in the body. The heart pumps blood which carries oxygen to other parts of your body. By doing physical activity you are helping make your heart stronger. The heart pumps about 70 times a minute. When you are being physically active your heart pumps even more.

Can you find your pulse?
Have the youth lay their hand and wrist flat on a desk. Feel

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with their fingertips of their other hand along the thumb side edge of the wrist (about an inch below the base of the thumb) to feel their pulse. (The pulse can also be found on the side of the neck by lifting the chin slightly and feeling for the pulse in the "soft spot" on your throat, just to the side of the “Adam’s apple".

When they have found it, have them count the number of pulses in six seconds then add a zero.

Have the youth run in place for a couple of minutes. Repeat the process of finding their pulse. What is your pulse now?

As a class, create a 5-minute routine of physical activity that the class could do everyday. Your routine may be walking in place for a minute, doing 10 toe touches, running in place for a minute, doing 10 toe touches, and walking in place for a minute. You could even pick a favorite song to play when doing the activity.

Have students check their pulse at different times after different activities to see when their heart rate is higher.

Students could also check their heart rate for a week and compare when it is higher and lower.

Talk It Over:

How many of you are breathing harder after you ran in place? *(When you ran in place you were taking in more oxygen for your working muscles.)* The more physically active we are, the stronger are our muscles.

Does anyone know what it means to be physically active? *(getting up and doing something such as walking, running, playing)* It can also be things like raking leaves, or shoveling snow.

What are some things you have done today or yesterday to be active?

We need to be active so that we can have strong muscles such as our hearts. Being active helps our lungs work better so that we can get oxygen to our brains!

Apply:

Have youth share their favorite indoor and outdoor activity and discuss ways they could become more active. *(It’s OK to watch some television, but we need to balance our inactive and active physical activities.)*

Discuss what is on the scorecard this month:
Xross (ski or run) - Bounce (basketball) - Flip (gymnastics)