Grade 1: Nutrition

Lesson 7: Creating Colorful Meals with the Food Groups

Objectives:
- Students will identify the basic food groups.
- Students will create colorful meals from the basic food groups.
- Students will identify fruits and vegetables as part of a healthy diet.
- Students will create meals and snacks that include colorful fruits and vegetables.
- Students will report foods eaten during a day.

Materials:
- Numerous pictures of food cut out of magazines. (You might want to ask student volunteers to do this in advance.)
- Magazines
- School lunch and breakfast menus
- Construction paper
- Glue
- Scissors
- Planning a Healthy Meal - Parent Letter (See Figure 1)
- Sharing a Healthy Snack with the Class – Parent Letter (See Figure 2)
- Healthy Snack Cookbook – Parent Letter (See Figure 3)

Children’s Literature:
- Good Enough to Eat: A Kid’s Guide to Food and Nutrition by Lizzy Rockwell
- You Are What You Eat (Rookie Read—About Health) by Sharon Gordon
- Eat Healthy, Feel Great by William Sears, Martha Sears, Christie Watts Kelly, and Renee Andriani

Activity Summary:
In this lesson students will create colorful meals that include a variety of fruits, vegetables, grains, dairy products, meat and beans.

Background information for the teacher:
Believe it! Colorful meals actually have a better variety of nutrients than meals that are monochromatic. Mother was right—you should have green, red (or blue or purple), yellow (or orange), white, and beige on your plate.

The most colorful parts of a well-balanced meal are the fruits and vegetables. Dairy products are white and many grains and dried beans are beige or brown. (White grains are overly refined and not as healthy as whole grains that still have their color.) These categories—fruits, vegetables, grains, dairy, and meat or beans—make up the basic food groups found in most food pyramids.
The Choose My Plate plan from the Department of Agriculture ([www.choosemyplate.gov](http://www.choosemyplate.gov)) These basic groups. It has guidelines for the number of servings a person should eat each day from each group.

However, an easy way to accomplish the same thing is to be sure every meal is colorful. If every meal includes at least five colors and follows a few basic rules, you will be eating a healthy diet. Here are the rules:

**Rules for Colorful Meals**
1) Eat five different colors in each meal;
2) Include at least three servings of fruits or vegetables in a meal;
3) Include some dairy, and meat or beans;
4) Include a whole grains.

The chart below lists what is considered to be approximately one serving:

**Serving Sizes**
- Fruits and vegetables—1/2 cup
- Dairy—milk, 1 cup; cheese, 1 ½ ounces
- Grains—1 slice bread, 1 cup dry cereal, ½ cup rice or pasta
- Meat and Beans—2 ounces meat, fish, or poultry; 2 T. peanut butter; ½ cup cooked beans.

**Snacks** should also be colorful. Try to include at least two colors in any snack. Combining half an apple and a piece of cheese makes a healthy and colorful snack. A piece of celery with one tablespoon of peanut butter is also colorful and healthy. Help students think of combinations that involve different colors and include fresh foods as much as possible. If food is fresh and colorful it is less likely to be processed, packaged, and loaded with sugar and saturated fat.

Although fruits have sugar, they also contain vitamins, minerals, and fiber. Whole fruits are preferable to fruit juices because juices don’t contain the fiber our Digestive System needs. Raw vegetables such as carrots, celery, radishes, pepper strips, and squash sticks make great healthy snacks. Combine them with a piece of cheese or some peanut butter and you have a snack that contains protein, fiber, vitamins, and minerals.

Another general rule is to eat three-four fruit servings per day and four-five vegetable servings. You don’t want to get all your color from fruits, as they contain more sugar than vegetables, and vegetables have valuable nutrients not contained in many fruits. (See the chart below for some of the nutrients found in the different colors of fruits and vegetables.)
Sample Menus

Breakfast:
- whole grain cereal (oatmeal, granola)
- 1 cup milk
- ½ banana
- ½ cup berries
- ½ cup 100% orange juice

Lunch:
- ½ peanut butter sandwich on whole wheat bread
- 1 cup milk (or soymilk)
- ½ cup celery sticks
- ½ cup carrot sticks
- 1 red apple

Dinner:
- 1 piece of chicken (without the skin)
- ½ cup brown rice
- ½ cup steamed broccoli with grated cheese
- ½ cup zucchini and yellow squash sticks
- ½ cup blueberries for dessert

FOOD COLOR & NUTRIENT CHART

<table>
<thead>
<tr>
<th>Color</th>
<th>Nutrients</th>
<th>Foods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Green</td>
<td>Vitamin A, B vitamins,</td>
<td>Kale, Chard, Collards,</td>
</tr>
<tr>
<td></td>
<td>Vitamin C, Vitamin E,</td>
<td>Arugula, Spinach, Beet greens</td>
</tr>
<tr>
<td></td>
<td>Vitamin K, Calcium, Copper</td>
<td>Turnip greens, Mustard greens</td>
</tr>
<tr>
<td></td>
<td>Iron, Magnesium,</td>
<td>Dandelion, greens, Broccoli</td>
</tr>
<tr>
<td></td>
<td>Potassium</td>
<td>Green beans, Asparagus</td>
</tr>
<tr>
<td>Red, blue, purple</td>
<td>Vitamin C, Vitamin A</td>
<td>Red peppers, Blueberries,</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Raspberries, Strawberries</td>
</tr>
</tbody>
</table>
Engage (10 minutes):
Organize the class into four or five teams. Have the teams sit together at tables or on the floor. Give each team captain a selection of food pictures.

On the board or a large piece of chart paper, create five columns labeled:

<table>
<thead>
<tr>
<th>Fruits</th>
<th>Vegetables</th>
<th>Grains</th>
<th>Dairy</th>
<th>Meat and Beans</th>
</tr>
</thead>
</table>

Tell students they will be sorting pictures into food groups. Give students an example for each category by placing one food picture under each column. Have the teams spend a little time looking at their pictures to see if they know what groups they belong to.

When each group is ready, have one student from each team come up to the board one at a time with a food picture, rotating among the teams. After the student places the picture where their team believes it belongs, have the class vote on whether that placement is correct. (If you wish, students can keep score.)

Once all the pictures have been placed, have students study the categories. Explain that every meal should include foods from each of these categories and they will be learning a fun way to create healthy meals by looking at food colors.

Explore (15 minutes):
Have students look at and consider the categories on the board. Then lead a discussion by asking the following questions:

1. **“What do you notice about these categories?”** (Ask an open question to get creative answers.)

2. **“What colors do you see?”**

3. **“Which categories have the most colors?”** (Fruits and vegetables – write this on the board.)

4. Explain that we get essential **VITAMINS** and **MINERALS** from food. Vitamins and minerals are very good for your body. Ask: **“Which food group do you think gives you the most vitamins and minerals?”** (Fruits and vegetables.) **“If our body really needs vitamins and minerals, how often should we eat them?”** (They should be part of every meal.)

5. Tell students they will be creating meals with lots of vitamins and minerals by making sure the meals are **COLORFUL**. Say: **“To help us make colorful meals we need to have some rules. Let's figure them out.”** (Have the children try to figure out the rules.)

6. Have the “Colorful Meals Rule Chart” posted on the board, with each rule covered up by a strip of paper. Say: **“Pretend we are planning a healthy meal. What is ONE thing you think is important to include?”** (If they get any part of the answer (such as "Fruit"), take the strip of paper off and discuss the rule.) Continue, only telling them the answers if they can’t figure them out. (Rule #1 will probably be the only one they don’t think of.)

**Rules for Colorful Meals**

1. Eat five different colors at each meal
2. Include at least three servings of fruits or vegetables at each meal
3. Include some dairy, meat, or beans
4. Include a whole grain

➢ **Note:** Although dietary guidelines from the Department of Agriculture indicate that children should have dairy with each meal, some students may be lactose intolerant and may wish to replace dairy with soymilk or other non-dairy protein alternatives. Also consider that some students may be sensitive to wheat and need to substitute other grains. In addition, students from other cultures may avoid certain foods. Be sensitive to these special needs.

**Explain** (15 minutes):
1. Summarize and review all the Colorful Meals Rules. Say: **“Now let’s put together our own colorful meal so we can see what it looks like.”**

2. Using the pictures posted on the board from the earlier activity, have the entire class create a colorful meal together. Draw a plate on the board, large enough to include all the pictures. Have the students, following the rule chart, pick out three pictures of **vegetables or fruits** and place them in the “plate.” Next, have a student choose a dairy product, meat, or bean and place those pictures in the “plate.” Finally, have a student pick a whole grain. (As each rule is met, check it off.) After the “plate” is completed, ask if the meal has **five different colors**. If not, help the students figure out what needs to be replaced or added. If needed, repeat the activity and create a breakfast using the Colorful Meals Rules.

3. Say: **“Now let’s apply this to our daily life. Let’s look at a school lunch menu and see if it fits the Colorful Meal Rules.”** Draw another large “plate” on the board next to the first one.

4. Read the menu and have the students identify what food group each food is in and what color it is. Test the school lunch menu to see if it follows the five rules of planning a healthy, colorful meal. Put pictures (or quickly draw) each food item in the circle.

5. Have the students compare the two circles and draw conclusions about which one they think fits the Colorful Meal Rules best. Have them explain their reasons. If needed, repeat the activity with a school breakfast menu.

6. Help students understand that they can use the Colorful Meals Rules to make healthier choices when they have lunch each day.

**Extend:**
To get parents involved, send home a paper encouraging them to plan a healthy meal by including all the rules in one meal. Encourage them to have their child help plan and prepare the meal, then draw a picture of their healthy meal or write down what they included in the meal. Have both the parent and the child sign the paper and return it. **(See Figure 1)**

**Evaluate:**
Give a stack of magazines, paper, scissors and glue to each student. Have each student create a new colorful meal by cutting out food pictures and gluing them onto the paper. Have students put their name on their paper and label the meal breakfast, lunch, or dinner. On the paper the students should mark #1, #2, #3, and #4 by the food item for that rule. Have students draw a circle around the part of the meal that is the most colorful.
Optional Enrichment Activity: My Healthy Habits Book
Each student will create a “Healthy Habits” book that illustrates what healthy habits they are going to practice for Nutrition. (The “My Healthy Habits Book” will also include habits from the Exercise, Hygiene, and Self-Esteem lessons in this unit.)

Give each student a Title page (one page of 8 1/2 x 11 paper.) Across the top have the students print “Colorful Meals.” Next give each child one page for each of the following vocabulary words: Fruits, Vegetables, Grains, Dairy, and Meat and Beans.

For each vocabulary word, have the child do drawings or paste pictures to illustrate the word.

Each page should be three-hole punched. When the “Healthy Habits Book” is completed for all the unit lessons, it can be assembled by tying yarn or colored ribbon through the holes.

Home Activities:
1. Have students report for a day (or each day for a week) on what colorful meals they ate the day before. Begin the day by having each student record one colorful meal on a piece of paper. Post these on the board as examples.

2. Send home a note (See Figure 2) asking parents to share a healthy snack that they have prepared with their child. If possible, have the parent to come to school and help the children make the snack.

3. Send home a note asking parents and the child to talk about the student’s favorite healthy snack. It can be simple (like a plain apple) or a simple recipe. Request that parents send back the form, saying what their favorite healthy snack is and include the recipe, if possible. Create a classroom book featuring all the students’ favorite snacks. Send the book home so children and parents have ideas for healthy snacks. (See Figure 3)

Additional Web Resources

Missouri Standards

Frameworks: Health and Physical Education
II. Health Maintenance and Enhancement
B. Nutrition Principles and Practices

What All Students Should Know:
1. Basic principle of nutrition (food sources, my plate with essential nutrients) are necessary for an understanding of how nutrition and health are interrelated.

What All Students Should Be Able To Do:
   a. Identify, locate, and select information about the sources and basic functions of the six essential nutrients.
   b. Create your plate based on the primary nutrient content.

What All Students Should Know:
2. Balance, variety and moderation in the diet will enhance and promote health.

What All Students Should Be Able To Do:
   a. Make informed decisions regarding food choices based on an understanding of balance, moderation and variety.
Dear Parent/Guardian:
Colorful meals actually have a better variety of nutrients. The most colorful parts of a well-balanced meal are the fruits and vegetables. We want children to be able to plan a healthy meal. Please take the time to plan and prepare a healthy meal with your child.

Directions: With your child, plan a HEALTHY MEAL, remembering to use the “Rules for Colorful Meals” below. After planning and eating your Healthy Meal, draw a plate on this page, then draw on the “plate” each food you ate, and label it. When you are finished, please sign your name at the bottom and return to class.

Rules for Colorful Meals:
1) Eat FIVE different colors in each meal.
2) Include at least THREE servings of fruits or vegetables in each meal.
3) Include some dairy, meat, or beans
4) Include a whole grain.
Dear Parent or Guardian:

Believe it! Colorful meals actually have a better variety of nutrients. The most colorful parts of a well-balanced meal are the FRUITS and VEGETABLES. Dairy products are white and many grains and dried beans are beige or brown. These categories—fruits, vegetables, grains, dairy, and meat or beans—make up the basic food groups found in most food pyramids.

We want to enable children to make healthy choices when eating meals AND when choosing a snack. Snacks should also be colorful. In fact, when preparing a snack you should try to include AT LEAST TWO colors. Sometimes it can be difficult to think of healthy snacks, so if you have a healthy snack that your child really enjoys we would love to have you come in and share it with the class. Please contact me with your idea and we’ll schedule a time for you to visit our classroom.

Sincerely,

Dear Parent or Guardian:

Believe it! Colorful meals actually have a better variety of nutrients. The most colorful parts of a well-balanced meal are the FRUITS and VEGETABLES. Dairy products are white and many grains and dried beans are beige or brown. These categories—fruits, vegetables, grains, dairy, and meat or beans—make up the basic food groups found in most food pyramids.

We want to enable children to make healthy choices when eating meals AND when choosing a snack. Snacks should also be colorful. In fact, when
preparing a snack you should try to include AT LEAST TWO colors. Sometimes it can be difficult to think of healthy snacks, so if you have a healthy snack that your child really enjoys we would love to have you come in and share it with the class. Please contact me with your idea and we'll schedule a time for you to visit our classroom.

Sincerely,

Figure 3:

Believe it! Colorful meals actually have a better variety of nutrients. The most colorful parts of a well-balanced meal are the FRUITS and VEGETABLES. Dairy products are white and many grains and dried beans are beige or brown. These categories—fruits, vegetables, grains, dairy, and meat or beans—make up the basic food groups found in most food pyramids.

We want to enable children to make healthy choices when eating meals AND when choosing a snack. Snacks should also be colorful. In fact, when making a snack you should try to include AT LEAST TWO colors. Sometimes it can be difficult to think of healthy snacks, so our class will be making a "cookbook" of healthy snacks. We would like to include your child’s favorite healthy snack. It can be simple (like a plain apple) or a simple recipe. Please return this form telling us what your child’s favorite healthy snack is. If there is a recipe please include it as well.

When all the students have shared their healthy snack recipe I will compile a Healthy Snack Cookbook and send the book home so the children and their parents have new ideas for healthy snacks!

_________________Favorite Snack is _______________________________

Student’s Name      Name of Snack
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________

_________________Favorite Snack is _______________________________

Student’s Name      Name of Snack
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________
________________________________________________________________