Nutrition Education for Life

MyPlate

4th-5th Grade Lesson Plan

Goal: Familiarize students with the food groups in MyPlate

Objectives:

1. Students will be able to name the five healthy food groups.
2. Students will be able to state where nutrients come from.
3. Students will be able to identify a healthy plate that reflects the goals of MyPlate

Materials Needed

- ☐ MyPlate poster
- ☐ Nutrient Super Hero posters
- ☐ Food Group Name Posters
- ☐ Food pictures/food models
- ☐ Meal cards 3-4-4
- ☐ Pyramid bottom and top foods
- ☐ Materials for activities
- ☐ Student and Parent handouts
- ☐ Incentive (Nutrition folders)
- ☐ Food Group Name Posters

Lesson

Talking Points	Materials/Activities/Notes
Introduction	
• Introduce yourself, go over rules/expectations for the class and discuss what a nutritionist does or what nutrition means. Show the students the nutrition folders they will receive and explain that they will use them for the handouts they will receive. Tell them that you will be giving them a handout to fill out each class. This will help them to understand the lesson and will allow them to review before the next class. Also, encourage them to take the Parent handouts home and to "teach" the adults at home what they learned in nutrition class.	
Mind Grabber	
• How many of you have heard the phrase, "You are what you eat."? What do you think it means? If I eat an apple, I'll be an apple? No, of course not. But, the food we choose to put into our bodies does something in our bodies, right? This year we are going to talk about what food does for our bodies. First, let's name some of your favorite foods? Great list. I'm going to teach you how to think of food in a little different way when we are together. We are going to learn about the NUTRIENTS we get from the foods we eat. Nutrients are important chemical substances our bodies need to stay alive and healthy. Our bodies cannot make these nutrients—we must get them from the foods we eat. It is like the nutrients have special jobs - or comparing them to superheroes - special powers to keep our bodies healthy. To help us remember the nutrients and what they do, we are going	Quickly poll the class for some of their favorite foods Write the word "Nutrients" on the board or show a poster of the word

give them each a special name—a nutrient super hero name. But first, let's just talk about the food.

Discussion

The Food Groups and MyPlate

- Like I said, food is very important for our bodies. Food is what gives our bodies what they need to stay alive - NUTRIENTS. Depending on what kinds of food we eat, our bodies will feel good and strong, I would call that healthy, or our bodies might feel more tired, sluggish or less healthy. How do you want to feel most of the time? You want to feel good, strong, and energetic, right? Choosing the right foods to eat at most meals and snacks will help your body feel good, strong and healthy.

You can act out looking strong by making muscles when talk about being healthy and strong.

- Take a look at this picture of MyPlate. Has anyone seen this before? This year, we're going to use MyPlate to learn more about all the food groups and the healthy foods we should eat.

Show the student the MyPlate poster and hang it up.

- How many food groups are there? Five, that's right!
- Take a look at the MyPlate poster and think about what your plate looks like when you eat lunch or supper. Do they look similar? Let's talk a bit more about MyPlate. How much of the MyPlate is covered with fruits and vegetables? (half) How much is protein (a little less than ¼). How much is Grains? (little more than ¼) Why do you think they put Dairy over here? (Notice, it is the size of a cup holder. They want you to remember to drink milk with your meal.) But, you could get food from the Dairy group onto your plate another way: by putting cheese over some vegetables or putting a slice of cheese on a sandwich, or eating a cup of yogurt with your fruit.
- There are many foods in the world and we can sort them into the five food groups. We sort them by what the food gives our body to keep it strong, fit and healthy. Another way to think about it is, we sort the foods by the job they do to keep our body feeling good and healthy. Let's sort foods into the food groups.

<u>Food Group Activity</u>

- We are going to do an activity where we sort foods into the five food groups. I'm going to give you a picture of a food and when I say it is time I want you to go and stand by the poster that names the food group your food is from. Once everyone has made their way to the correct spot we will share our pictures and talk about the foods. (Pass out the pictures or food models)

Give every student a picture of a food. Tape and/or place the Food Group Name Cards around the room so the students travel to different areas of the room.

- Okay, everyone move to the food group where your food belongs. Now, let's look at the foods in each group.
- Each of the food groups may provide the body with a few different kinds of nutrients but each food group has a **main** or **most important** nutrient that the foods from that group give to our bodies when we eat them. Look at the MyPlate poster. Because each food group gives us something different it is important to eat foods from each food group at a meal, like the poster shows us. In every group there are choices that are better for our bodies than others. We call these foods "Green light" or "Go foods" because we could "go ahead" and eat them every day. Green light foods have lots of the nutrients we need with little or none of the things we do not need a lot of - sugar, fat, and salt. We will learn more about making smart choices from each group in future classes and I'll show you some examples as we go through each food group.

Once the students have sorted themselves go through each food group, having the students share their pictures with the class, and give an overview of each group.

- The **Grains Group**. Will the grain group please come to the front of the class and

Have the students come to the front of the class, tell everyone what they have

show everyone your foods.

- Grains foods include any kind of bread, pasta, rice, oatmeal, all the different kinds of cereals, popcorn and crackers. These foods are rich in, or have a lot of the nutrient, **Carbohydrate**. This nutrient is important because it gives our bodies **energy.** The grains group foods all come from plants and are mostly brown or white. The pictures you have seen are Green light foods from the Grains group.
- Here is a picture of a doughnut. This is an example of a less healthy choice of a food from the Grains group, or a "Yellow Light" food because you need to slow down and not eat it too often. This doughnut does have the nutrient Carbohydrate, that gives your body energy, but it also has a lot more sugar and fat then our bodies need every day. So, to take care of your body, eat doughnuts only once in awhile. (Once a week or every other week.)

and remain standing while you speak a little on the grains group. Collect their pictures when done and have them return to their seats. Move onto the next group.

Write **Carbohydrate** on the board.

Show a picture of a doughnut.

- The **Fruit Group** and the **Vegetable Group.** Will the fruit group and the vegetable group please come to the front of the class and show everyone your foods.
  - Remember that fruits and vegetables are in two different food groups, but they have so much in common that we talk about them together. They are just like brothers and sisters in a family. (They have a lot in common but they are different people.) The foods from both these groups come from plants, are very colorful and tasty, and they are both loaded with the nutrients, **Vitamins** and **Minerals.** Both vegetables and fruits can be eaten fresh, frozen, dried or canned. To give our bodies all the vitamins and minerals they need we should eat different colored vegetables and fruits.
  - An example of a yellow food from the fruit group is a piece of apple pie. A yellow light food from the vegetable group would be French fries. Why? (too much sugar & fat, too much fat respectively)

Have the fruit group kids and the vegetable group students stay apart at the front of the class to exemplify the two distinct groups.

Write **Vitamins** and **Minerals** on the board.

- The **Dairy Group.** (formerly the Milk Group) Dairy group please come up and show us your pictures.
  - The Dairy group includes milk, and foods made from milk—yogurt, cheese, pudding and some soups. The Dairy group foods give our bodies the nutrient - a **Mineral -** called **Calcium.** Our bodies need calcium to make our bones and teeth strong. All of the milk group foods come from cows.
  - A yellow light food from the Dairy group would be ice cream. Why? (Too much fat & sugar)

You can mention that some milk group foods could come from goats because some cheeses are made from milk from a goat rather than milk from a cow.

Write **Mineral-Calcium** on the board

- The **Protein Group.** (formerly the Meat and Bean Group) Last but not least - protein group please come forward.
  - The Protein group includes: beans, nuts, fish, meats & poultry. When we eat these foods they give our bodies the nutrient **Protein** which we need grow, to keep our bodies (and muscles) strong and to help us heal when we get hurt. Some of these foods come from animals and some come from plants. Can you all separate by which one of you has a picture from a plant from who has a picture from an animal?
  - A yellow light food from the protein group is a fried chicken. Why? (Too much fat)

Write **Protein** on the board.

Have the students separate into two groups at the front of the class: the pictures of foods from an animal and those from a plant.

Making a Healthy Plate

- We can see each food group is very important to give our bodies what they need to stay strong and healthy. If you leave out one food group then you would not be giving your body an important nutrient it needs. Look at the MyPlate poster. Notice, this is a plate for lunch or dinner and all five food groups are on it. A good rule to follow to make sure you are eating enough food from each group every day

Have the kids hold up 3 fingers then 4 fingers as you teach the rule.

is the **3-4-4 Rule.** The rule: try to get 3 food groups at breakfast, 4 food groups at lunch and 4 food groups at dinner.

- Now that we reviewed the food in the five food groups and talked about making healthy food choice using the MyPlate as a guide let's practice with an activity.

Show the students the Meal cards 3-4-4.

Building a MyPlate Activity: (can be done with 3 stations, groups rotating through each or just choose one and do it as a whole class)

- **Activity One: Build a MyPlate**
  - Using the Healthy Foods Magnet Board: have the group work together to "build" a healthy MyPlate example - OR - Using the handout "Build a MyPlate," give each group member a handout and have them fill it out for themselves.
- **Activity Two: Which are the MyPlate Meals**
  - Using the group of mini-posters titled, "Which are the MyPlate Meals" have the group sort the posters into meals like MyPlate and meals that are not like MyPlate.
- **Activity Three: Make it a MyPlate Meal**
  - Using the group of mini-posters titled, "Make it a MyPlate Meal" have the group discuss each meal and come up with changes they could make to make the meals more like MyPlate. (The group may need a sheet of paper to write down their suggestions.)

Have the students divide into three groups and rotate through the activity stations (1-3 minutes each) OR choose to do one of the MyPlate picture activities in front of the class with the classes help.

If you use the three activity rotation you and the classroom teacher can float among the groups and interjection instruction as needed. When all groups have rotated through and the students are back in their seat ask for feedback on each of the activities.

Wrap-Up

- Let's review everything we have gone over today. We have discussed the fact that food gives our bodies important NUTRIENTS we need to stay strong, fast, energetic, and healthy. We need to get food from each food group every day to make sure our bodies are getting all the different NUTRIENTS. Following the **3-4-4** Rule will help us get foods from all five food groups in a day. And, the MyPlate poster is a guide that helps us choose foods for lunch and dinner in the right proportion to getting all the NUTRIENTS in correct amounts. Now I'm going to introduce you to the Nutrient Superheroes. We are going to talk a lot about what they do in our bodies and what foods they are found in for the rest of the nutrition classes we will have together.
- <u>Carbohydrates:</u> Meet Captain Carbohydrate!
  - **Mission:** Captain Carbohydrate gives the body "get up and go" energy to run, jump and play. Captain Carbohydrate is the body's main source of energy and is needed for the kidneys, the brain and the muscles (including the heart) to function properly**.** Captain Carbohydrate provides our bodies with 4 calories per gram.
  - **Source of Power:** Carbohydrates are mainly found in starchy foods like bread, pasta and potatoes and in fruits and milk. Most of the carbohydrates we eat come from the Grains Group and the Fruit Group. We also get some carbohydrates when we eat foods from the Dairy Group, the Vegetable Group and from beans in the Protein Group.
- <u>Protein:</u> Meet Power Protein!
  - **Mission:** Power Protein is important because she helps us to grow and repair the tissues in our bodies - not the tissues you use to blow your nose. I mean the stuff your body is made up of. Your (strong!) muscles, blood, skin, hair, nails and your organs are all made up of Power Protein. Power Protein also helps our immune function by fighting off disease or illness. Power Protein even has a food group named after her on MyPlate. Power Protein provides our bodies with 4 calories per gram.
  - **Source of Power:** Protein is found in meat, chicken, fish, nuts, beans, cheese and milk. Most of the protein we eat comes from the Protein Group and from the Dairy Group. There is a small amount of protein in the Grains Group and in the Vegetable Group foods.

- Fat: Meet Fat Cat!
    - **Mission:** Fat Cat is needed in the diet to allow for normal growth and development, to provide cushioning for organs and to absorb certain vitamins *(A, D, E, K).* Fat also insulates our bodies (keeps us warm). Think of Fat Cat like a warm jacket in wintertime. Fat Cat also makes food taste good. Fat Cat provides our bodies with 9 calories per gram.
    - **Source of Power:** Fat Cat is found in meat, chicken, nuts, milk, cheese, oils, butter, margarine and salad dressings. Most of the fat we eat comes from the Protein Group, the Milk Group and from extra fats we add to our food (such as butter, margarine, oils, salad dressing).
- Water: Meet Wonder Water!
    - **Mission:** Without Wonder Water your body would stop working properly. Wonder Water makes up more than half of your body weight and a person cannot survive for more than a few days without it. Why not? Your body has lots of important jobs, and it needs Wonder Water to do many of them. For instance, your blood, which contains a lot of water, carries oxygen to all the cells of your body. Without oxygen, those tiny cells would die and your body would stop working. Wonder Water lubricates the body and is also needed to digest your food and get rid of waste (elimination). Wonder Water is the ONLY macronutrient that does not supply the body with energy (calories).
    - **Source of Power:** Wonder Water is found in the water you drink every day, as well as, juices, fruits and vegetables.
- Vitamins: Meet VitaMan!
    - **Mission:** VitaMan helps chemical reactions occur in the body. Each vitamin has a special job in the body. For instance, Vitamin A in carrots helps with night vision, Vitamin C in oranges helps your body heal if you get a cut and the B vitamins in leafy green vegetables help your body make protein and energy.
    - **Source of Power:** VitaMan is found in dark green and orange vegetables, fruits, grains, milk, eggs, pork, peas and lentils. Every food group provides us with vitamins!
- Minerals: Meet Mighty Mineral!
    - **Mission:** Aren't minerals something you find in the earth, like iron and quartz? Well, yes, but small amounts of some minerals are also in food. Mighty Mineral helps your body grow, develop and stay healthy. He performs many different functions – from building strong bones and teeth to making hormones and maintaining a normal heartbeat. Can you name the mineral that builds strong bones and teeth? *(calcium)*
    - **Source of Power:** Mighty Mineral (like VitaMan) is found in all the food groups. For example, calcium is found in milk, cheese and yogurt. Iron is found in meat, chicken, fish and dark green leafy vegetables. Magnesium is found in whole grain products, fruits and vegetables.
- Now that we have met all of the nutrient super heroes, we are going to spend the rest of the year talking about them and what foods we need to eat to get them into our bodies to keep them healthy. To make sure you understood, let's play a game: "Super Hero" to the rescue.

Activity: Which Nutrient "Super Hero" will come to the rescue?

- Tell students there are some problems in the nutrient kingdom. You need them to tell you which Nutrient "Super Hero" can come to the rescue! *(Nutritionist will introduce six scenarios to students. After each scenario, students will identify which Nutrient "Super Hero" would be able to resolve the situation with the help of that nutrient's functions.)*

  Scenario #1

John and Fernando are playing basketball in the hot summer sun. John misses a shot. The boys get tired and begin overheating with sweat dripping down their faces. John and Fernando have to stop their game of one-on-one basketball because they're too hot and thirsty to continue. What Nutrient "Super Hero" could solve their problem? Who will come to the rescue? *(Wonder Water!)*

Scenario #2

Young Ashanti overslept this morning and rushed out the door without eating breakfast. She struggles to stay awake in her 4th grade classroom, unable to focus on her teacher's lessons. Ashanti doesn't have any energy. She can't keep up with the lesson being taught because she's so tired. What Nutrient "Super Hero" could give Ashanti more energy? *(Captain Carbohydrate!)*

Scenario #3

Antonia and Jessica are playing tag at night with some of the other neighborhood kids. Antonia is chasing Jessica. All of a sudden Jessica runs into a tree with Antonia following. "Ouch", screams Jessica, "where did that come from? I couldn't see that tree at night!" Which Nutrient "Super Hero" could help her solve her problem? Who will come to the rescue? *(Vita Man!)*

Scenario #4

Mrs. Ryan, Stephanie's and Chris' 5th grade teacher, has asked them to stay after school to help her move some books and rearrange some desks. Stephanie and Chris are excited to help their teacher, but soon after they begin, they both start to feel weak. "These desks are too heavy", says Stephanie. "I don't have the strength to lift them", says Chris. "Same here", exclaims Stephanie, "I feel like I have no strength left in my muscles!" Which Nutrient "Super Hero" could solve her problem? Who will come to their rescue? *(Power Protein*)

Scenario #5

Germaine, wearing a light-weight blue jacket, is walking to school. The sun is out and the temperature is already 65 degrees this morning. But Germaine is cold and shivering on his way to school. The other kids are walking by without jackets and feeling fine. Germaine sits down to rest and to try to get warm, but he knows he has to get right back up or he'll be late for school. Which Nutrient "Super Hero" could come to the rescue? *(Fat Cat!)*

Scenario #6

Active and athletic, Jose, rollerblades across the sidewalk and flies off a ramp, flailing into a huge crash. Even though Jose was wearing his helmet, kneepads and wrist pads, he has fallen and hurt his arm. His doctor has determined that it is broken and puts a cast on Jose. In order to help the bones heal properly, what Nutrient "Super Hero" does Jose need? Who will come to the rescue? *(Mighty Mineral!)*

- Great! We will spend more time learning more about these superheroes in future lessons.

Challenge

- I'm going to leave you with a challenge: Try to follow the **3-4-4 Rule** when choosing and eating (remember, the food doesn't do you any good if it is on your plate but never makes it to your stomach) food for breakfast, lunch and dinner. Next class we will be learning how to use a nutrition tool called, the Food Label.

Small Group Activities (10-15 minute activities) If using the 3 activity stations:

Teacher Activities: The teacher can be assigned to one of the stations to monitor and interjection guidance when

needed.

Nutritionist Activities: Float between the other two activity stations to monitor, guide and teach as needed. When the students have rotated through all of them lead the class in discussing some of their thoughts and answers as a teaching exercise.

Student Handouts

- Let's Go Shopping
- Build a MyPlate Handout
- Healthy Food Choices
- Where Does My Food Go on MyPlate

Parent Handouts

- Choose MyPlate 10 Tip Sheet (English and Spanish)
- Parent Letter (English and Spanish)
- Today in Nutrition Class – Nutrient Superheroes (English & Spanish)

Lesson Roadmap

- Introduction
  - Go over class rules and give out folders
- Mind Grabber
  - Define Nutrients
- Discussion
  - Introduce MyPlate
  - Review Food Groups
    - Food Group Activity
  - Making a Healthy Plate
    - 3-4-4 Rule
    - Build a MyPlate Activity
      - Choose one activity to do up front with the whole class **OR**
      - Set up 3 stations and have class rotate through them
- Wrap-Up
- Challenge

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