Fruit & Vegetables: Exercise Intensity

Create MyPlate Teens for Grades 6-8

MATERIALS NEEDED

MyPlate poster, whiteboard/chalkboard or big sticky notes, colored markers, fruit and veggie information cards, snack ingredients.

OVERVIEW & PURPOSE

Students will learn about the importance of eating a variety of fruits and vegetables, as well as recommended serving sizes, and common nutrients, vitamins and minerals found in fruits and vegetables. Students will also learn about the varying degrees of intensity of physical activity.

Utah Health Education Standards 2; Objectives 1-3

- 1. Objective 1: Describe the components and benefits of proper nutrition.
- 2. Objective 2: Analyze how physical activity benefits overall health.
- 3. Objective 3: Recognize the importance of a healthy body image and develop appropriate weight management behaviors.

SNAP-Ed Message

- 1. Students will identify the recommended amounts of fruits and vegetables they should eat in a day.
- 2. Learn why fruits and vegetables are healthy for your body.
- 3. Identify differences between preventable illness and chronic diseases.
- 4. Identify the recommended amount of daily physical activity by age.

BACKGROUND INFORMATION (not to be taught as part of the lesson)

- Most middle schoolers don't get the recommended amounts of fruits and vegetables, typically eating less than 2 servings a day.
- Eating a variety of fruits and vegetables across the color spectrum helps us get all the nutrients they offer.
- Most middle schoolers aren't getting the recommended amount of physical activity (60 minutes a day)
- Screen time is a major contributor to sedentary behaviors (and snacking), with many kids spending 9 hours a day in front of screens, 5 of which is usually watching TV.

TEACHING THE LESSON: My Colorful Plate, 35 minutes

This lesson will focus on eating a variety of fruits and vegetables, students will peer-lead the class in learning about the colors of fruits and vegetables, they'll also learn how to use their hands to estimate a serving of fruit and veggies.

Anchor (3 minutes): Writing prompt to introduce the variety of fruits and vegetables available, as well as identifying their favorites.

Before class, have the colors written on the board: red, orange, yellow, green, blue, purple, white.

Introducing the lesson topic, say: "Today we're going to be talking about fruits and vegetables! To get our juices flowing, we're going to start with making a list of our favorite fruits and vegetables, if you don't have a favorite, think about ones you like or ones you'd like to try. Try to write at least one for each color." (give them a couple minutes for this) Prompt with ideas: corn on the cob, tomatoes in salsa, thanksgiving sweet potatoes, etc.

Two options: have them write their examples on their own pieces of paper or let them name some and have the teacher write them on the board. (have them keep their lists because they will need them for the follow-up activity/apply section of the lesson; alternatively, leave the list on the board)

Add (7 minutes): Provide information on their age group's FV consumption, MyPlate

Show class the MyPlate poster and point out the fruit and vegetable section, ask them, "How much of your plate should be covered in fruits and vegetables?" (half)

That's right! Half our plates should be fruits and vegetables. Does anybody know how many servings we should get?

We need 3 servings of vegetables and 2 servings of fruit every day, so 5 total servings every single day. Sadly, a lot of young people don't even eat 2 servings of fruits and vegetables combined on an average day.

Why are fruits and vegetables so important? What are some of their health benefits? (Let them name reasons)

- High in vitamins and minerals
- High in fiber
- Can be low in calories (depending on preparation)
- Low in fat
- Juicy = water content
- Whole fruit is a quick and easy snack
- Support bodily functions: immune system, bowel movements
- They taste good too!

Not only is it important to eat enough fruits and vegetables, but eating a variety helps make sure that we are getting all the valuable nutrients they offer because there are just *so many* different types (reference the board or their lists)! Most Americans fall short of the nutrients, vitamins, and minerals that fruits and veggies are full of, like fiber, iron, potassium and calcium.

One way to help us make sure we're not missing anything is by trying to eat as many colors of fruits and veggies as we can, making your plate as colorful as possible.

Did you have a hard time thinking of favorites or examples for any of the color groups? (let them share)

Apply (20 minutes): Students will take responsibility for teaching their classmates about the value of each group of fruits and vegetables

Their turn to teach: break the students in 6 groups, they should take their favorites lists with them, distribute colored pencils, crayons or markers in the following colors, one to each group: red, orange or yellow, green, blue or purple, and black or gray for the white group, any color will work for the beans/legume group since they don't fall into a specific color group.

Explain the activity (5 mins): Each group will be assigned a different color, their job will be to explain to the class the major benefits of their assigned color using a handout that will provide the information they need.

- They should include major nutrients, vitamins, minerals in their color, benefits of them/why our bodies need them, and list examples (they should use their lists as a reference but encourage them to think of more examples in their given color).
- It should be big enough for the class to read. They will be the ones teaching the class about their color, so make sure they're prepared to talk about it too!
- Encourage them to get creative with the time they have.

<u>Give the students 5-10 minutes</u> to write their information. Use a whiteboard/chalkboard or big sticky notes for this so that all of the students can see their information.

When they're done making their visuals, invite the groups up one at a time to showcase their color and present their information. (5-10 minutes)

See how many important vitamins, minerals and nutrients there are in fruits and vegetables? This is why it's important to try and eat every color. Was anything surprising to you?

Away (5 minutes): Practical approach to understand what counts as a serving and encourage eating a variety of F&V.

Now we know why it's important to make your plate as colorful as possible, but how do you know that you're actually eating enough? You need 5 cups of fruits and vegetables each day, but what does that look like? Luckily, you can use your hands as a simple way to measure and remember. Encourage the class to practice with you, repeat it a couple times:

- Strive for 5 (hold up your hand with fingers spread out) servings a day with as many colors as possible.
- Canned, frozen, whole, cooked or fresh, one serving should be the size of your fist (hold up fist, it's roughly equivalent to a cup). For example: a fresh apple the size of your fist counts as 1 serving, cooked corn on your plate about the size of your fist would also count as 1 serving.
- Dried fruit loses lots of water, you'll only need a palmful (hold up palm and use a finger to circle
 it) of those to count.
- Leafy greens have lots of air in between the leaves, so you need two handfuls (make a bowl with your hands, about two cups which counts as <u>one serving</u>).

4 oz of 100% fruit juice but because it is high in natural sugars and easy to drink a lot of, it's okay in small amounts but whole fruit is a better choice.

PHYSICAL ACTIVITY: Exercise Intensity (15 minutes)

Anchor: low, moderate and vigorous activity (5 minutes)

Warm up: spell out their names with the exercise sheet from the youth curriculum or have everyone do the exercises to spell the names of a couple fruit/veg

We know that it's important to get an hour, or 60 minutes, of physical activity each day, but it also matters how *vigorous* or *intense* that exercise is. Can anyone explain what moderate or intense means?

- Vigorous means that it requires a lot of effort
- Intense indicates that it takes a lot of force or uses a lot of energy

What would be the opposites of vigorous or intense? (not very much effort, easy) We call this type of exercise "light" or low-intensity exercise.

Add: types of activities (3 minutes)

Low-intensity activities include our usual, everyday activities, like walking to class or getting ready for school.

Moderate activities are in between low-intensity and vigorous activity, like skateboarding or dancing. Can you think of any other examples of what might be moderate activity?

- Brisk walking
- Kayaking
- Hiking
- Housework and yardwork like sweeping or mowing
- Baseball, softball
- Kicking a soccer ball
- Playing HORSE or similar games that don't require running

Vigorous activities require a lot of effort, like running, swimming laps or biking uphill. What else is a vigorous activity?

- Jumping rope
- Cross-country skiing
- Games that involve running: tag, football, basketball, soccer, tennis
- Intense dancing, like zumba
- Martial arts

How can you tell how intense an exercise is?

- Check your heart rate
- How hard you're breathing
- How quickly you get tired
- Sweating

Apply: heart rate, the talk test (3 minutes)

One way to remember is the talk test:

- During low intensity activities you can carry a conversation.
- During moderate activities, you're able to talk but not able to sing and may have a harder time continuing a conversation.
- During vigorous activities, you can only speak a few words without stopping for a breath.

Checking your heart rate is another way of seeing how intense an exercise is. Who knows what "heart rate" means? What about resting heart rate?

- It's a measure of how many times your heart beats every minute
- Resting heart rate is how many beats per minute your heart needs in order to maintain normal functions.

Away: what type of activity do you think you need more of? (4 minutes)

Does anyone know how to check their pulse?

- Find a vein in a wrist or side of neck, time yourself for 15 seconds and count how many heart beats you feel, then multiply that number by 4 (you could also time for 30 seconds and double it)
- How many times your heart beats every minute is different for everyone depending on age, genetics, health conditions and physical fitness.

Let's practice checking our heart rates while we're resting! Make sure everyone knows where to feel their pulse, time them for either 15 or 30 seconds and calculate beats per minute accordingly.

A normal resting heart rate for your age is between 60-100 beats per minute, so the more your heart beats during the activity, the more intense the exercise is.

Which types of activities do you think you spend the most time doing each week?

How can you incorporate more moderate and vigorous physical activity into your week?

- Do physical activities with friends and family
- Try going for a walk after school, ride your bike to and from school
- Take study breaks to do something active, like jump rope or play an active game

HFAITHY SNACK: 15 minutes

SOURCES

<u>Centers for Disease Control and Prevention.(2017). National Center for Chronic Disease</u>
<u>Prevention and Health Promotion, Division of Nutrition, Physical Activity, and Obesity.Data,</u>
<u>Trend and Maps https://www.cdc.gov/nccdphp/dnpao/data-trends-maps/index.html.</u>

Nutrition voyage

Gillette Children's Specialty Healthcare. *Your Pulse and Target Heart Rate.* (n.d.) https://www.gillettechildrens.org/your-visit/patient-education/your-pulse-and-target-heart-rate

Centers for Disease Control and Prevention. (April 10, 2020). *Aerobic, Muscle-and-Bone Strengthening:*What Counts for School-Aged Children and Adolescents?

https://www.cdc.gov/physicalactivity/basics/children/what_counts.htm