

Nutrition, Health and Fitness Project Area Guide



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Nutrition, Health and Fitness Project Area STEM Activities

Ctrl+click on each unit/activity number below to be taken to where it appears in the document.

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Activity 3.3: Choose Your Adventure
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If you are more interested in activities that have to do with food, food safety or food science, you may want to check out the Food Safety Project Area Guide.

Nutrition, Health and Fitness

Unit 1: Nutrition

Project Outcomes Addressed

- Explain the association between nutrition and health.
- List examples of foods from the five food groups.
- Describe the components of a healthy plate as illustrated in MyPlate.
- List two vegetables from each of the five color groups.
- Describe foods that should be consumed in greater amounts for good health.
- Describe foods that should be consumed in smaller amounts for good health.
- Give examples of healthy and unhealthy snacks.

You will need:

- pencils or markers
- access to the internet

Basics of Nutrition

One important way to improve our overall health is by eating nutritious foods! Healthy foods provide our bodies with energy and nutrients necessary for growth and development. By eating healthful foods, we have more energy to do all the fun, wonderful things we like!

The first activity is an introduction to the importance of nutrition. It begins with a closer look at what we eat and why it matters. Other activities go into more depth about the kinds of foods that we should be eating plenty of and those we need to eat in smaller amounts.

Activities in this Unit:

1. You Are What You Eat
2. Feed Your Systems
3. My Healthy Plate
4. Eating a Rainbow
5. Slow, Go, Whoa

Activity 1.1:

You Are What You Eat

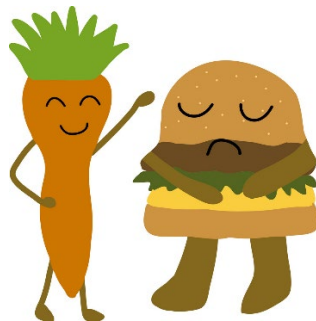
Sometimes it is difficult to understand why what we eat and drink matters. Most of the time, we cannot see the effects of what we eat right away. Over time, a healthy diet will show on the inside and outside. A healthy diet helps your skin, hair and even your teeth become healthier. It also gives you energy. That's because every time you eat or drink, big things are happening inside your body! Your body is using what it needs from the foods you eat so that you grow and stay healthy.

Project Outcomes Addressed

- Explain why good nutrition is important for good health.

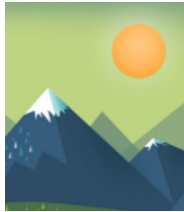
Think About It

You are what you eat. What does that mean? If all you eat is broccoli, will you become a vegetable? Will you become a chicken if all you eat are chicken nuggets? Of course not, but those foods will determine how you grow and how you feel. You are what you eat is an old proverb, or saying, which means that in order to be fit and healthy, you need to eat good food.

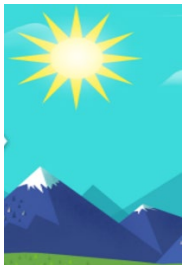


What Do I Eat?

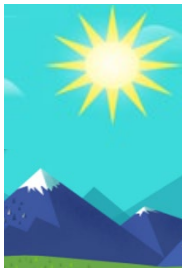
What kinds of foods are you eating? Think about the kinds of foods you eat and what you drink on most days and write them down.



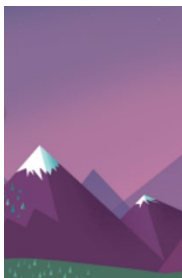
What do you eat when you get up in the morning?



What do you eat around lunchtime or mid-day?



What do you eat in the afternoon after you get out of school?



What do you eat around dusk or dinnertime?



What do you eat around bedtime or at night?

What I Eat and Drink

Inside and around the outline of the human body below, draw or write the names of foods you normally eat and drink at different times of day. If you eat or drink something more than once a day, draw or write it each time you consume it.

What are foods you eat in the morning?

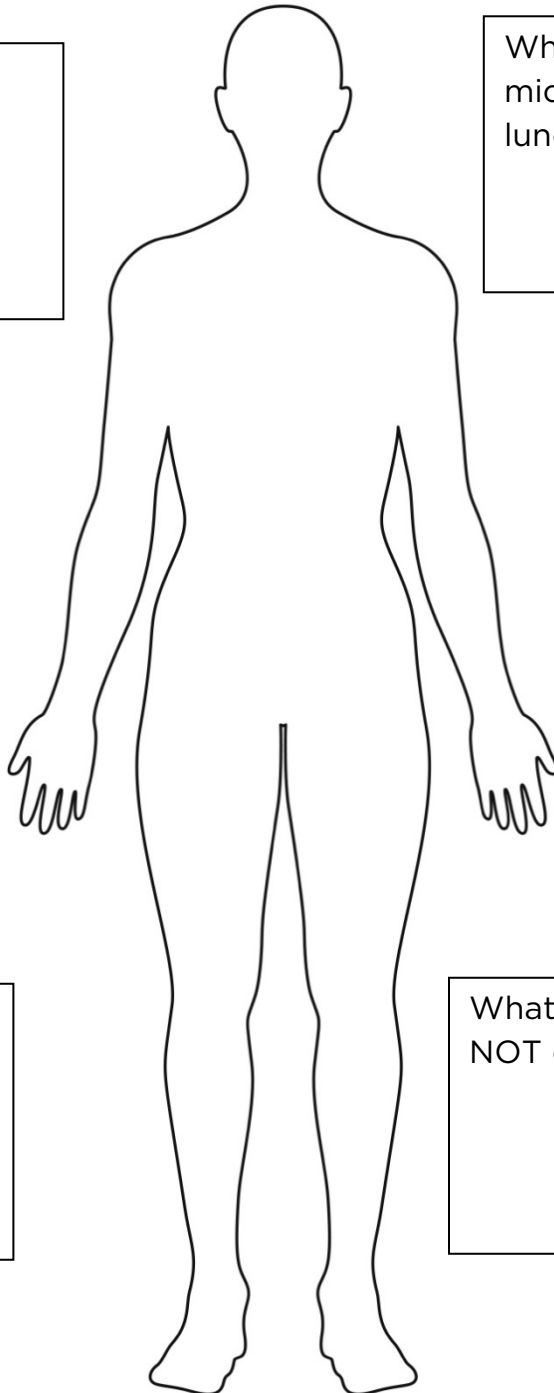
What are foods you eat mid-day or around lunchtime?

What are foods you eat in the afternoon or after school?

What are foods you eat around dinnertime?

What are foods you eat around bedtime?

What are foods you should NOT eat around bedtime?



It's a System

Most of what we know about our bodies is what we see on the outside. What do you see when you look at the outside of your body? You mostly see skin covering your bones and muscles. What you see on the outside is just part of who you are. There are also some amazing things going on inside your body you cannot see. Let's learn more about what is on the inside.

Inside our bodies we have systems. What is a system? It is a group of objects or things that work together and depend on each other. In the case of our bodies, we have many systems.

Watch the video linked to the QR code below to learn more about the systems in your body.



The systems of the human body are responsible for keeping you alive and well.

Can you name four of the major systems mentioned in the video?



1. _____
2. _____
3. _____
4. _____

Check your answers on the next page!

Possible answer options:

- Circulatory System
- Respiratory System
- Digestive System
- Bones/Skeletal System
- Muscular System

All of these body systems need each other so you grow and stay healthy. For example, the digestive system takes in food and breaks it down into very small parts your body can use. The digestive system works with the circulatory system to take food where it needs to go. When blood circulates, it takes food through all parts of your body.

What do you think would happen if your body did not get food? There would be no food for the blood to carry. Your body systems couldn't work!

The human body doesn't want just any kind of food. It needs nutrient-dense food. Your body and each system must have good food. [Nutrition](#) is the science that determines what foods we need in order to grow and be healthy. It comes from the word [nutrient](#), which is something that feeds our bodies.

Up Next: In the next activity, you will learn more about the food you need to eat to feed your systems.

Activity 1.2: Feed Your Systems

Now that you have seen what is inside your body, let's learn about what's inside your food. As you learned in the first activity, nutrients are things in food that your body needs for growth and health.

Project Outcomes Addressed

- List examples of foods from the five food groups.

Think About It

There are many nutrients, more than most people can remember. The easiest way to think about nutrients is to figure out how foods can be grouped together so that if you eat those foods, you are likely to get the nutrients you need.

Food Groups

Foods are divided into groups because of the nutrients they typically provide. If you eat different kinds of foods from each of the food groups, chances are that you will get the nutrients you need. Foods are divided into five food groups: fruits, vegetables, grains, protein and dairy.

Fruits



Fruits may be fresh, canned, frozen or dried, they may be whole or cut up into pieces.

Apples	Oranges
Applesauce	Peaches
Bananas	
Berries	Pineapple
Cantaloupes	Plums
Grapes	Strawberries
Grapefruit	Watermelon

Vegetables



Vegetables may be raw or cooked; fresh, frozen, canned or dried/dehydrated; and they may be whole, cut up into pieces or mashed.

Bean sprouts	Lettuce
Cabbage	Mushrooms
Cauliflower	Onions
Carrots	Pumpkin
Celery	Raw leafy greens
Corn	Red peppers
Cucumbers	Spinach
Green beans	Squash
Green peas	Sweet potatoes
Green peppers	Tomato juice
Greens	Tomatoes
	White potatoes

Grains



Any food made from wheat, rice, oats, cornmeal, barley or another cereal grain is a grain product and is considered part of the grains group.

Bagels	Grits
Biscuits	Oatmeal
Bread	Pancakes
Breakfast cereals	Pasta
Bulgur	Popcorn
Cornbread	Rice
Crackers	Tortillas
English muffins	

Protein



All foods made from meat, poultry, seafood, beans, peas, eggs, processed soy products, nuts and seeds are considered part of the protein foods group.

Beef	Nuts
Beans	Peas
Chicken	Pork
Duck	Seeds
Eggs	Shellfish like shrimp
Fish	Turkey
Lamb	Venison

Dairy



All liquid milk products and many foods made from milk are considered part of this food group. Foods made from milk that have calcium are part of the group. Foods made from milk that have little to no calcium, such as cream cheese, cream and butter, are not.

Calcium	Plant-based milk with calcium
Cheese	Soy milk with calcium
Milk (Whole, 2%, 1%, skim)	Yogurt

Where Do Your Foods Fit?

How do the foods you normally eat fit in the five food groups?

On the next page, write the foods you normally eat (from Activity 1) in the correct food group boxes below. If foods do not fit into any of the five food groups, they most likely have a lot of sugar and fat. They might be foods like cookies, candy, cake, doughnuts, pie, chips and sugar-sweetened drinks (sweet tea, soft drinks, sports drinks). List these foods in the yellow box.

Fruit Group	Vegetable Group
Grains Group	Protein Group
Dairy Group	Sugar and Fat Foods

Do Your Foods Fit into Each of the Five Food Groups?

How many different **fruits** did you eat? _____

How many different **vegetables** did you eat? _____

How many different **grains** did you eat? _____

How many different **proteins** did you eat? _____

How many different **dairy** foods did you eat? _____

How many foods high in **sugar and fat** did you eat? _____

If you were to describe to someone how well you eat, what would you say?
Write a few sentences on whether or not you normally eat foods from each of
the food groups. Do you eat more than one kind of food in each food group?
Where do you think you could improve?

Up Next: In the next activity, you will learn more about eating using a healthy plate.

Activity 1.3: My Healthy Plate

Now that you know about the five food groups, let's learn a helpful way to use a plate to be sure you eat from the food groups each day.

Project Outcomes Addressed

- Describe how a healthy plate should look.

Think About It

If you could take a picture of your plate, how would it look? Circle the image which your plate looks the most like.

Plate A



Plate B



If you picked Plate B, the hamburger and french fries, you are like many other people. These foods taste good, and you can find them at most restaurants. What many people are missing are colorful vegetables and fruit. Yes, ketchup is made from tomatoes, but it doesn't count as a serving of vegetable from the vegetable group.

Did you know...

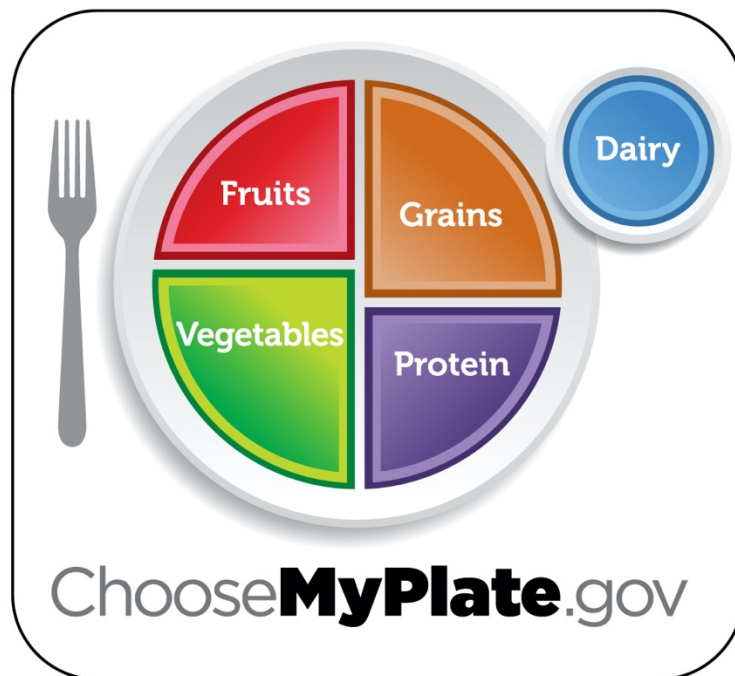


Thomas Jefferson is said to be the person who introduced Americans to french fries.

Some say that the average American eats nearly 30 pounds of french fries each year.
(National Geographic, nationalgeographic.com)

MyPlate

The federal government has created a picture called “MyPlate” to remind people to eat healthy foods. It is a reminder to eat different kinds of foods in the right amounts.



What do you see when you look at the plate in the picture above? Draw a line through the middle of the plate from top to bottom (or vertical). What foods are on the left side of the line?

According to nutrition experts, fruits and vegetables should make up half your plate. The other side should be about half grains and half proteins. Foods from the dairy group should be part of your healthy plate.

Not every food you eat will fit on your plate exactly as shown. Remember to eat plenty of fruits and vegetables. Don't just load your plate with chips, sweets or even french fries. Get some fruits and vegetables on your plate!

Here are some ways to add fruits and vegetables to your plate. Check off the ways that sound good to you and you are willing to try. You can even add more ideas of your own.



☐ Add vegetables to your pizza



☐ Add vegetables to your burger and sandwich



☐ Snack on vegetables between meals



☐ Grab a piece of fruit



☐ Eat salads



☐ Make smoothies



☐ Eat vegetable soup

☐ _____

☐ _____

Anytime you see a picture of MyPlate, it should remind you of the importance of eating healthy foods from the five food groups. Whether you are eating at home or away, you have the power to choose what's on your plate. If you eat away from home, scan the QR code to learn how to make good choices when away from home.



Explore Some More

Visit MyPlate Kids' Place from the QR code below to find additional activity sheets, like *MyPlate Maze*, *Crack the Secret Code* and many others!



Up Next: In the next activity, you will learn more about eating a rainbow of colors.



Activity 1.4: Eat a Rainbow

Eating the rainbow is important, but that doesn't mean eating different colors of Skittles or M&M's! It means eating a lot of colorful fruits and vegetables.

Project Outcomes Addressed

- List two vegetables from each of the five color groups.

Think About It

Do you ever wonder why fruits, vegetables and other plant foods come in so many colors? They are there to help the plants, and they are also there for you!

Think about the fruits and vegetables you have eaten. Name as many colors as you can.

1. _____
2. _____
3. _____
4. _____
5. _____

Visit the fruit and veggie color list to see if you named them all. Scan the QR code next to the rainbow of fruits and veggies below.



Now, write the names of the color lists.

1. _____

2. _____

3. _____

4. _____

5. _____

The Power of Plants

What makes a tomato red or grapes purple? Colors come from chemicals in plants. These chemicals help the plant fight to grow and be healthy. A plant has to fight against insects, bacteria, viruses, too little rain and even too much sun. These chemicals also give plants their smell and flavor.

Did you know that an orange has more than 170 different kinds of these helpful chemicals?



These chemicals don't just help the plant—they also help people. They work in your body to help fight disease and sickness. This is why it is important to eat different colors of fruits and vegetables.

See if you can complete the word search on the next page. There are five fruits and vegetables from each of the five color lists. Can you find them? There may be a few, like grapes, that could be in more than one color list.



Fruit and Vegetable Word Search

R	E	O	P	N	J	Z	V	M	B	X	M	O	G	S	R	Y	Q	P	U
H	E	C	U	T	T	E	L	B	G	J	P	V	F	S	U	Z	L	Q	A
T	T	W	D	E	S	O	R	A	I	S	I	N	S	Q	U	A	S	H	W
V	N	E	O	V	P	A	G	H	H	C	A	E	P	S	H	A	Y	C	E
R	A	R	K	L	E	U	O	A	L	S	I	Z	M	X	T	N	F	E	Y
A	L	T	D	X	F	N	O	T	I	D	P	G	O	G	Z	A	T	L	G
D	P	W	R	M	D	I	E	L	O	B	A	P	W	O	R	N	V	E	X
I	G	U	Y	K	N	B	L	H	A	R	L	E	G	A	Q	A	Z	R	P
S	G	P	S	K	P	M	H	U	L	T	R	S	T	A	C	B	P	Y	Z
H	E	L	E	V	Z	X	J	I	A	G	N	A	N	E	R	M	K	E	F
E	T	I	W	M	X	A	C	P	D	C	T	A	C	O	U	Q	K	F	S
S	N	S	R	I	C	E	F	H	E	Z	I	H	C	L	I	R	Y	D	F
N	N	A	S	R	C	L	H	A	Y	J	H	C	P	B	Z	N	X	L	G
B	L	U	E	B	E	R	R	I	E	S	O	Y	W	H	N	M	O	S	L
B	P	B	O	D	A	B	W	U	X	L	I	Z	R	H	W	R	J	B	T
L	E	E	T	V	T	N	W	O	I	W	N	B	A	G	Z	Z	I	M	P
S	N	X	A	F	F	K	C	A	C	A	B	B	A	G	E	D	I	J	H
A	R	R	M	S	F	M	O	O	R	H	S	U	M	E	L	P	P	A	V
A	Z	T	O	A	P	K	B	E	E	T	S	Q	K	F	G	R	H	Q	T
E	L	M	T	C	X	S	O	S	K	I	S	H	U	T	K	C	J	K	E

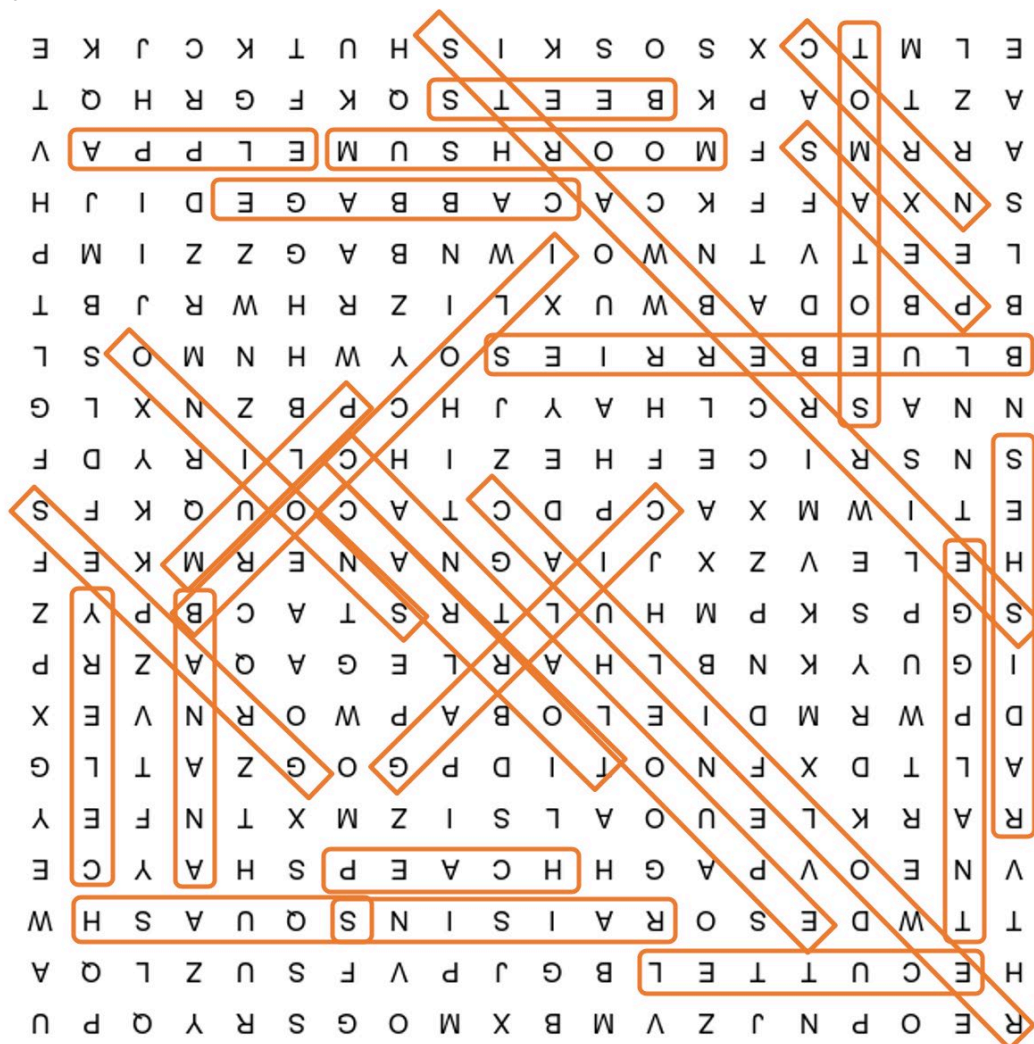
apple
banana
beets
blueberries
broccoli
cabbage

cantaloupe
carrot
cauliflower
celery
corn
eggplant

garlic
grapes
lettuce
mushroom
onions
peach

peas
plum
radishes
raisins
squash
strawberries
tomatoes

Check your word search answers below.



Explore Some More

Keep track of the colors you eat for a week using the Super Crew Colorful Food Tracker. Download the worksheet from the QR code to the right.

The worksheet divides the five color lists into seven groups. Orange and yellow are separate, and so are white and brown. Blue foods are included under purple, and the color black has been added. The point is to try to eat all the colors!



Up Next: In the next activity, you will learn more about a fun way to choose healthier foods for meals and snacks.

Activity 1.5: Go, Slow, Whoa

In the previous activities, you learned about MyPlate and how eating from all five food groups gives you energy and helps you grow. In this activity, you are going to learn how to identify foods that should be consumed most of the time (Go foods), sometimes (Slow foods), and once in a while (Whoa foods).

Project Outcomes Addressed

- Describe foods that should be consumed in greater amounts for good health.
- Describe foods that should be consumed in smaller amounts for good health.
- Give examples of healthy and unhealthy snacks.

Think About It

How do you decide what foods you should eat? Do you decide to eat a food because it tastes good, or maybe you choose a food because it is easy to grab? Perhaps you eat some foods because you feel bored or sad. Eating only foods that taste good is not always healthy for us. Eating nutritious foods can taste good too. Remember that eating healthy foods is what keeps our systems going!

Use the Light to Eat Right

Using a traffic signal can help you choose healthy foods to eat. Scan the QR code next to the *Go, Slow, Whoa* logo below to learn more about the right foods to eat!



Nemours.
Children's Health System





Go foods are good to eat most any time. They have many nutrients, but not as much salt, added sugars and unhealthy fats compared to Slow or Whoa foods. They are the healthiest choices.



Slow foods are ok to eat sometimes. They are not as healthy as Go foods, but they are healthier than Whoa foods. Slow foods have added sugar and fat, but not as much as Whoa foods.

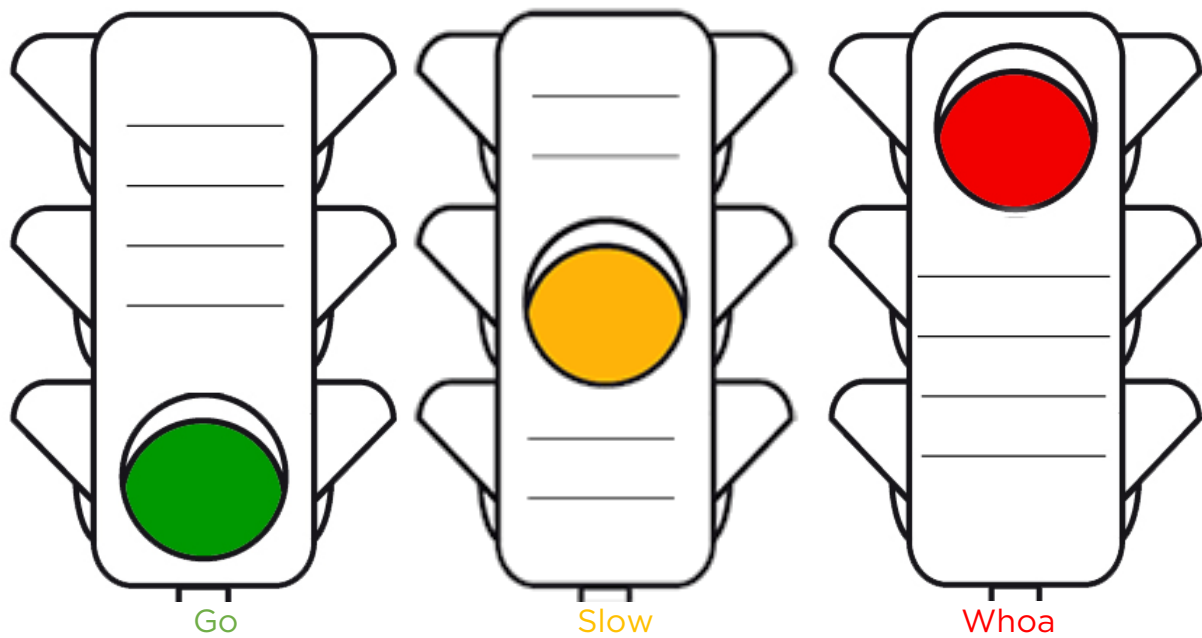


Whoa foods should only be eaten once in a while, not every day. These are foods that make you go, "Whoa! Should I eat that?"

Which foods are Go, Slow and Whoa?

Banana	Broccoli	Ice cream
White rice	2% milk	Whole-wheat bread
Hot dog	French fries	Lean beef
100% fruit juice	Ground beef	Regular chips
Pretzels		

See if you can determine which foods from the list above are Go, Slow and Whoa. Write them in the correct traffic light signal. Then check your answers using the chart on the next page.



What Foods are Go, Slow, and Whoa?

Go Foods



Fruit

Fresh, dried, frozen
and canned in juice or
water



Vegetables

Fresh, frozen and canned with
no sauce or added fat



Grains

100% whole-grain bread,
pasta, and cereal, brown rice



Protein

Lean meats, poultry and fish



Dairy

Plain skim or 1% milk,
part skim cheese, and
low-fat yogurt

Slow Foods



Fruit

100% fruit juice



Vegetables

Vegetables with sauces, added
fat and salt



Grains

Pasta and bread made with
refined (not whole-grain) flour,
pretzels, popcorn, baked chips



Protein

Lean luncheon meat such as
ham, baked chicken with skin
and lean hamburger



Dairy

2% milk, natural cheeses,
string cheese, and reduced
fat dairy foods

Whoa Foods



Fruit

Canned in heavy
syrup



Vegetables

Fried and deep
fried like french
fries



Grains

Cakes and cookies



Protein

Fried and processed meat (like
regular hot dogs)



Dairy

Whole milk, flavored
milk, processed cheese
and ice cream



Sweets and salty snacks

Drinks with added sugar, chips,
candy

Now, choose two Go foods you could eat for each of the five food groups below.

My Go Foods

Fruit	Vegetables
1.	1.
2.	2.
Grain Foods	Protein Foods
1.	1.
2.	2.
Dairy Foods	
1.	
2.	

Smart Snacks

As you grow, you need more and more energy during the day. Sometimes it's hard to wait for lunch or dinner to fuel up. The best way to snack, or eat in-between meals, is with fruits and vegetables. There are many ways to create delicious, healthy snacks. For example, apple slices and peanut butter is tasty and nutritious. You get vitamins from fruit, and proteins from the peanut butter help build strong muscles!

Scan the code to learn more ways to create healthy snacks. Once you've learned some new healthy snacks, list three healthy snacks for in-between meals:



1. _____
2. _____
3. _____

Nutrition, Health and Fitness

Unit 2: Health

Project Outcomes Addressed

- List the most common health problems.
- Explain the various factors that influence personal health.
- Define personal health.
- Explain reasons for immunization.
- Describe the importance of a healthy lifestyle.
- Explain barriers to a healthy lifestyle.

You will need:

- pencils or markers
- access to the internet

Basics of Health

In the previous units, we learned that healthy foods provide our bodies with energy and nutrients necessary for growth and development. By eating healthful foods, we have more energy to do all the fun, wonderful things we like! Nutrition improves our overall health. Another way to improve our overall health is through physical activity. In this unit, we will learn that being active for at least an hour every day helps reduce risk of several diseases and strengthens our heart, lungs and bones.

The first activity is an introduction to the different types of exercise. It begins with a closer look at aerobic and strengthening exercise. Other activities go into more depth about the kinds of activities that we can do to stay healthy as we age.

Activities in this unit:

1. Health Problems
2. Health, Personally
3. Shots, Vaccines and Immunizations, Oh My!
4. Live Health

Activity 2.1: Health Problems



Throughout this project area guide, you'll see QR codes like the one on your left. These will link you to a video, news article or website. To use them, scan the image using the camera on a smart device or click the image. Make sure to ask your parent(s)/guardian(s) for permission before using QR codes.

Scan the QR code to read about some of the most common chronic diseases.

Project Outcomes Addressed

- List the most common health problems.
- Explain the various factors that influence personal health.

Staying healthy is an important part of life. Unfortunately, sometimes people have issues that can negatively impact their health. What do you think are some of the most common health problems? Use the space below to brainstorm health problems you think have an impact on you, your family, or your friends. An example is included to get you started.

Common Health Problems:

- | | |
|------------|---|
| • Diabetes | • |
| • | • |
| • | • |

Chronic diseases are health issues that last more than one year, require regular medical attention and cause significant problems in people's lives. After reading about the chronic diseases, review your list above. Did you learn about any new conditions? Did you list any similar conditions?

Now, research two health conditions to learn more about their impact on staying healthy. Write facts about the health conditions in the table below.

Health Problem #1	
Health Problem #2	

Create a presentation to share this new information with your 4-H club. Make sure to upload it to your digital 4-H portfolio!

Activity 2.2

Health, Personally

Project Outcomes Addressed

- Define personal health.

Health is when someone is free from sickness, injury, disease and bodily conditions. Health involves more than not being sick; it is also about having physical, mental and social well-being.

What does personal health mean to you? Is it the physical activity you do to stay fit? How about the fruits and vegetables you eat? Does it include your friendships that make you feel good about yourself?

In the box below, draw a picture of a healthy lifestyle. Be creative, and remember to include all parts of health, including physical, mental and social well-being! If you need some inspiration about what a healthy lifestyle might look like, scan the QR code to your right.



Now that you've created the picture, write five things below that you already do to stay healthy. Look back at the article linked through the QR code on the previous page if you need help.

1. _____
2. _____
3. _____
4. _____
5. _____



Now, brainstorm some ways you can improve your health by writing a health goal and one action you could take to work towards it. Perhaps you could limit your screen time to two hours a day, or maybe you want to exercise outdoors more. Do your best to think of unique ideas that are personal for you! Check out the QR code to the left for some ideas. An example has been provided for you.

Health Goal	Action
<i>Example: Eat more vegetables.</i>	<i>Eat salad with my lunch.</i>

Health Goal	Action

Now, let's learn about personal health, which is one's ability to maintain a healthy lifestyle. There are many factors that influence personal health. Can you think of any? List them below.

Influences on Personal Health:

-
-
-
-



Watch the video to learn about what you can do to stay healthy. Remember that health is when sickness, injury, disease and bodily conditions are not present, and it includes physical, mental and social well-being.

Healthy People 2020 wrote about five categories that can influence people's health:

1. Policymaking
2. Social Factors
3. Health Services
4. Individual Behavior
5. Biology and Genetics



Scan the QR code to learn more about these factors. How does their list compare to yours? Are there any factors that you hadn't thought about?

Using the Healthy People 2020 categories as a guide, write about two factors you can work on to help improve your health. Follow the example provided below.

Health Factor:	What I Can Do:	How I Will Track My Progress:
<i>Example: Self-esteem</i>	<i>Use positive language when speaking about myself.</i>	<i>I will track my self-esteem level and positive talk for one week.</i>

Activity 2.3: Shots, Vaccines and Immunizations, Oh My!

Project Outcomes Addressed

- Explain reasons for immunization.

Let's first learn what each word means.

Immunization: a process to prevent the development of infectious diseases through vaccination.

Shot or Vaccination: the act of presenting a vaccine to the body to give immunity against a specific illness.

Vaccine: a liquid of killed or weakened microorganisms given usually by injection to increase protection against a specific illness.



Vaccines are an important tool in keeping you, your family and your friends healthy, but do you know how they work? Watch this short video to understand why we get vaccines and what they do.

Did you learn something new about vaccines? List three new things you learned about vaccines below.

1.

2.

3.

This article provides a great overview for the main reasons for vaccinations.





Did you know that you should receive vaccinations on a schedule based on your body's growth? Read about the recommended vaccine schedule for people your age.

Now, think about your personal experience with vaccines. Have you received any? If so, which ones and when? Do you know why you got certain vaccines? Fill in the chart below to detail your experience!

Vaccination	Age	Why	Received
Example: Chicken Pox (varicella)	12-15 months	Protects against chickenpox (varicella), a common and very contagious childhood viral illness.	X

Personal Vaccination Record, continued

Vaccination	Age	Why	Received

Are there any vaccinations you remember receiving? Write about one specific experience you had with vaccinations.

Activity 2.4: Live Healthy

Project Outcomes Addressed

- Describe the importance of a healthy lifestyle.
- Explain barriers to a healthy lifestyle.

Now that you know what it means to be healthy, why should you try to have a healthy lifestyle? The chart below includes some common reasons. Give an example to go along with each reason. Then, come up with two additional reasons and examples of your own.

Reason	Personal Example
Decreases illness	By eating a balanced diet, I can help prevent certain nutrition-related diseases.
Increases happiness	
Allows me to live an active life	
Feel my best	

Sometimes it is difficult to maintain a healthy lifestyle because of **barriers**, which are things that prevent people from taking action or making progress. Health barriers include technology, safety and schoolwork. Identifying barriers is the first step to overcoming them so you can improve your personal health.

Here is a list of common barriers and possible solutions to dealing with them:

- Screen time (TV, phone, computer) → limiting time spent using devices
- Dangers while playing → wearing a helmet, telling an adult where you are, using proper sports equipment
- Unsafe vehicle conditions → sit in the backseat, use proper child restraints such as a booster seat and wearing a seatbelt
- Not getting enough sleep → going to bed at a scheduled time, not using devices in bed
- Sun damage → wearing sunscreen, a hat and sunglasses

Can you think of other health barriers and possible solutions? Write about them below.

Choose two barriers that you can work on for one week. Record your progress in the chart below. Draw a check mark if you actively worked on the selected barrier for that day.

	Barriers		
	<i>Example: sun damage</i>		
Sunday	✓		
Monday	✓		
Tuesday	✓		
Wednesday	✓		
Thursday	✓		
Friday	✓		
Saturday	✓		

Now, write a short summary of how you worked to overcome your selected barriers. Make sure to include what you did to be healthier during the week, how you plan to maintain these changes and what you could have done on the days you didn't overcome your health barrier.

Nutrition, Health and Fitness

Unit 3: Fitness

Project Outcomes Addressed

- List the recommendations for physical activity for your age.
- Describe the benefits of physical activity.
- List examples of activities that can be integrated into the lifestyle.
- Compare and contrast low, moderate and high levels of physical activity intensity.
- Compare and contrast different types of physical activity (aerobic, strengthening).

You will need:

- pencils or markers
- access to the Internet

Basics of Fitness

In the previous units, we learned that healthy foods provide our bodies with energy and nutrients necessary for growth and development. By eating healthful foods, we have more energy to do all the fun, wonderful things we like! Nutrition improves our overall health. Another way to improve our overall health is through physical activity. In this unit, we will learn that being active for at least an hour every day helps reduce risk of several diseases and strengthens our heart, lungs and bones.

The first activity is an introduction to the different types of exercise. It begins with a closer look at aerobic and strengthening exercise. Other activities go into more depth about the kinds of activities that we can do to stay healthy as we age.

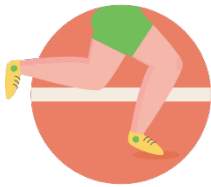
Activities in this Unit:

1. Strong and Fit
2. Working Hard
3. Choose Your Adventure
4. Plan to Be Fit

Activity 3.1: Strong and Fit

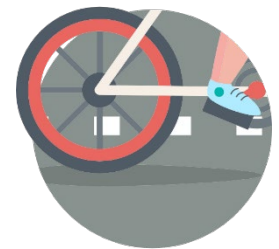
Project Outcomes Addressed

- List the recommendations for physical activity for your age.
- Compare and contrast different types of physical activity (aerobic, strengthening).



Being physically active means moving your body in ways that work your muscles. If you engage in activities that require more energy than sitting or lying down, you're engaging in physical activity. Some examples include walking, dancing, running and playing sports.

There are many different ways to be active, healthy and fit! Some activities get your heart pumping faster, and some require you to use your muscles more than usual.



We can group physical activities into two groups based on how they make us feel: **aerobic** and **strengthening**.

- Dancing makes your heart beat faster, and you breathe faster, so it is **aerobic** exercise.
- Push-ups work your hand and leg muscles more which makes them a **strengthening** activity.
 - Strengthening activities are divided in two groups: **muscle-strengthening** and **bone-strengthening**.

Scan the code to learn more!

Fitness Tip:

Remember to choose a variety of activities that you enjoy! Experts recommend that you get at least **60 minutes of physical activity per day**. For example, 15 minutes of walking, 30 minutes of biking, and 15 minutes of basketball would add up to 60 minutes, or you could just do one activity for an hour. It's up to you!

SCAN ME



List three examples of aerobic activities:



1. _____

2. _____

3. _____

List two examples of strengthening activities:



1. _____

2. _____



How often are you supposed to exercise?

1. _____

Activity 3.2: Working Hard

Project Outcomes Addressed

- Compare and contrast low, moderate and high levels of physical activity intensity.



There are three levels of aerobic physical activity. Each level depends on how much energy and effort you put into an activity. Can you guess what the levels are? **Scan the code** to find out more!



List the three levels of physical activity

1. _____

2. _____

If you can talk but not sing during an activity,
which activity level are you doing?

If you are sweating and breathing hard, which activity
level are you doing?



We've learned there are **light**, **moderate** and **vigorous** physical activities. It is recommended that people your age spend most of their physical activity engaging in either moderate or vigorous intensity activities.

Scan the code to learn more about aerobic exercises for different age groups.



Try this!

For the next week, track your activities each day. Be sure to include the type of activity, the length of time you spent doing that activity, and whether it is aerobic, bone-strengthening or muscle-strengthening. You can use a template like the one below or you can make your own.





Aerobic

some examples

- Bicycle riding
- Walking to School
- Rollerblading
- Baseball/Softball
- Swimming
- Soccer
- Dancing



Bone-Strengthening

some examples

- Hopping, Skipping
- Jumping Rope
- Jogging/Running
- Tennis
- Jumping
- Basketball
- Volleyball



Muscle-Strengthening

some examples

- Tug of War
- Push-Ups
- Rope Climbing
- Sit-ups
- Swinging
- Gymnastics
- Tree Climbing

Monday, April 4

Today is:

Activity	minutes			
rode my bike	15	☒	☐	☐
climbed tree	23	☐	☐	☒
hop-scotch	30	☐	☒	☐
		☐	☐	☐
		☐	☐	☐

Today is:

Activity	minutes			
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐

Today is:

Activity	minutes			
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐

Today is:

Activity	minutes			
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
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Today is:

Activity	minutes			
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Today is:

Activity	minutes			
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		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐

Today is:

Activity	minutes			
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐

Activity 3.3: Choose Your Adventure

Project Outcomes Addressed

- List examples of activities that can be integrated into the lifestyle.

In Activity 1, you learned about different types of physical activities and recommendations for physical activity. In Activity 2, you compared and contrasted low, moderate and high levels of physical activities. Look back to the daily log of your daily activities, and then answer the questions below:

1. Were your activities more aerobic or strengthening?

2. Were your activities light, moderate or vigorous?

3. Did you meet the recommended time for physical activity for your age group?



Now you are going to learn some new ideas of physical activities you can complete now and as you get older. Scan the QR codes to find examples of aerobic and strengthening exercises.

People under age twelve do not need to do formal muscle-strengthening activities, but as you grow into an adolescent, you can try lifting weights with proper instructions and adult supervision.

List as many examples as possible of aerobic and strengthening activities for each age group in the space below.

	6-9	10-12	13-17
Aerobic	<i>Example: running</i>		
Strengthening	<i>Example: squats</i>		

Activity 3.4: Plan to Be Fit

Project Outcomes Addressed

- Describe the benefits of physical activity.

Now that we've learned the different ways to be active, let's look at why it is important to be fit and healthy. Can you think of a few reasons why being active is important?

Scan the QR code to find out more!



What are some of the benefits of physical activity?

1. _____
2. _____
3. _____
4. _____



We've seen that being active has many benefits! Active people feel better, are more alert, have more energy, sleep better at night and are at less risk of having health problems. If you are interested in sports either for fun or competition, being active is a great way to hone your skills! Even if you are not interested in playing sports, there are many things you can do to stay fit that will improve your life.

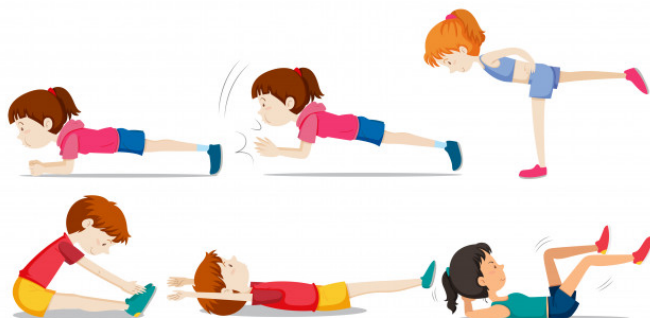
Scan the code to learn how to RUN FASTER!



Scan the code to learn how to REACH HIGHER!



Scan the code to learn how to GET STRONGER!



You've learned what physical activity is, why it's important and how we can increase our activity levels. Now let's come up with a game plan tailored just for you! **Scan the code** to refresh your memory on what you've learned. Make sure to answer the questions as you go.



For your final activity, you are going to create your very own game plan to stay healthy through physical activity. You can use the next page to build your weekly fitness routine, or you can make your own plan. Look back at the previous activities to remind yourself of the recommended amount and type of exercise for your age.



Aerobic

some examples

- Bicycle riding
- Walking to School
- Rollerblading
- Baseball/Softball
- Swimming
- Soccer
- Dancing



Bone-Strengthening

some examples

- Hopping, Skipping
- Jumping Rope
- Jogging/Running
- Tennis
- Jumping
- Basketball
- Volleyball



Muscle-Strengthening

some examples

- Tug of War
- Push-Ups
- Rope Climbing
- Sit-ups
- Swinging
- Gymnastics
- Tree Climbing

Monday, April 4

Today is:

Activity	minutes			
rode my bike	15	☒	☐	☐
climbed tree	23	☐	☐	☒
hop-scotch	30	☐	☒	☐
		☐	☐	☐
		☐	☐	☐

Today is:

Activity	minutes			
		☐	☐	☐
		☐	☐	☐
		☐	☐	☐
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Today is:

Activity	minutes			
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Today is:

Activity	minutes			
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Today is:

Activity	minutes			
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Today is:

Activity	minutes			
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Today is:

Activity	minutes			
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Congratulations! You have completed the **Nutrition Health and Fitness Beginner Project Area Guide**. You are now ready to learn more about your favorite topics and share your knowledge with others. As you create new projects, continue uploading them to your digital portfolio.



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