# Chapter 5

# Information for Station Presenters







# Information for Station Presenters

The information presented in each station will help students learn the key concepts and outcomes for that station. You are an integral part of the learning experience because you will present all of the information and lead the activities.

The paper script that you have been given to review will NOT be used on the day of Body Walk. You will use a large flipbook. The flipbook pages will have pictures on the front for students to look at, and the script will be on the back of the page.

Students tour the human body exhibit with Power Panther graphics as a guide. Power Panther is the USDA Food and Nutrition Service mascot. Throughout the exhibit, they will learn how to apply Power Panther's slogan, **EAT SMART. PLAY HARD.** 

To make the Body Walk experience more fun for everyone, here are a few tips:

- Familiarize yourself with the script prior to Body Walk. This will ensure you are more relaxed and confident with the information you are presenting.
- Have fun yourself! The more animated and engaging you are, the more the students will learn and remember.
- Dress the part! A few suggestions are included in your script packet.
- Maintain eye contact with the students.
- Encourage everyone to participate.
- Instruct students to sit down when they first enter the station. Explain that they are not to touch or lean against the walls of the exhibit.
- Ask students to WALK to the next station.
- Please ensure students handle the exhibit props carefully. No kicking or punching of exhibit walls.
- All presenters will be responsible for maintaining an atmosphere of learning rather than running or playing.
- The exhibit is enclosed. It could be stuffy or hot inside your assigned station. Dress comfortably so that you can move freely with the students as you do activities together.
- Bring a bottle of water to keep your voice working! No gum, food or drink (except water) allowed inside the exhibit.
- Socks must be worn by presenters. No shoes or bare feet allowed in exhibit!

# Notes

### Station 1 - Brain

#### **Key Concept**

Power Panther says, EAT SMART. PLAY HARD. Healthy food choices from MyPyramid and vigorous exercise help jump-start your brain!

#### **Key Outcomes**

Students will be able to:

- Identify the five food groups from MyPyramid.
- Tell the number of servings needed for good health from each MyPyramid group.
- Explain what physical activity means. Tell how much physical activity a student needs everyday.
- State that a helmet protects the brain while playing hard.

#### **Station Description**

Students will enter the domed Brain Station through one ear and exit through the other. The Brain Station has a vinyl floor covered with a "squishy" foam material in "brain matter" color. There is a firm path from ear to ear inside the brain to ensure that it is handicap accessible. There are 3 battery-powered strobe lights to simulate "brain impulses." Please inform the Body Walk manager is you have students with migraine and/or seizure disorders triggered by strobe lights.

#### **Suggested Costume for Presenter**

- "Superbrain" cape This could be made from an old sheet, large plastic trash bag or other easily accessible material. It might be painted with bright symbols, question marks, exclamation points or lightning "zaps" to represent brain waves.
- Surgical scrubs

Station 1 – Brain Flipbook	
Graphics	Script
Life-size stand-up graphic of Power Panther	Brain station presenter will greet students outside of the Brain dome.
	Power Panther welcomes you to Body Walk!!! Power Panther has an important message for you – EAT SMART. PLAY HARD.  Point to the life size cutout of Power Panther.
	Let's go in this ear and sit on the soft floor of the brain, and you'll start an adventure through the body.
Child thinking of foods and physical activity	You use your brain every day to make important choices in your life.
	Your brain sends messages to all parts of your body and controls everything your body does. <i>Point to strobe lights</i> . Each of these flashes is like a message from your brain to all parts of your body.
Brain showing lobes	Your brain is soft like the floor we're sitting on. Your skull helps protect your brain.
	Show brain model.
MyPyramid	Different parts of your brain let you think, talk, hear, move, see, taste, and smell. Your brain helps you choose the good foods you eat everyday.
	Show MyPyramid on flipbook and tell the five Pyramid groups. Point out that the smallest slice of the Pyramid is fats and oils.
	Is it OK to have foods from this slice? (Yes, but they should be limited.)
	Look at these foods. Hold up various bagged, plastic food models.
	Do you eat about this much? (Probably the portion sizes eaten are larger — many restaurants super-size, etc.)
	When you super-size your meal, you're eating too much.

Station 1 – Brain Flipbook	
Graphics	Script
Cereal, fruit, yogurt, milk	How many of you eat breakfast?  Wait for responses.  Breakfast is important because it gives your brain energy to  "jump start" your day. Your body needs food for energy to  think during the morning at school.
Power Panther demonstrating physical activity doing several different activities and looking at his watch.	Power Panther tells us to PLAY HARD. Kids your age need at least 1 HOUR of physical activity every day.  Being active reduces the risk of certain diseases, makes our bones grow stronger, helps us grow bigger muscles and keeps our bodies from storing too much fat.
Power Panther engaged in various activities and wearing the appropriate protective gear while riding a bike, roller blading, etc.	We've talked about Eating Smart and Playing Hard to help our brain. What else can we do to protect our brain?  Wait for answers.  Show bicycle helmet.  ALWAYS WEAR A HELMET WHEN YOU PLAY HARD. A helmet protects your brain from injury.  We're ready to leave the brain. At the next station you'll get a food tag. Let's go out of the brain through the other ear.



Body Walk Brain Dome

# Station 2 - Body Walk Lunch Room

#### **Station Description**

Students will receive a food tag after they exit the Brain Station. At the Body Walk Lunch Room, students will be given a brief overview of Body Walk. The volunteer will interact with the children using the script provided. There is no flipbook for this station, however a laminated script will be provided.

# **Suggested Costume for Presenter**

Apron (provided) Hair net



#### **Script**

Please sit down on a carpet square.

Give each student a food tag. There are 5 different colors of food tags. Be sure that within the group, all 5 colors are represented.

Here is a food tag. Please keep it with you throughout the Body Walk. When you finish your tour of Body Walk, your food tag can be used as a bookmark. Welcome to our Body Walk Lunch Room. Your food tag tells you what food you are as you are traveling through the digestive system. You're going to see what happens to the food you eat. You are a food from one of the five MyPyramid groups. What are those pyramid groups? *Wait for responses*.

- Grain group (bread, cereal, rice, pasta)
- Vegetable group
- Fruit group
- Milk group
- Meat & beans group

Fats and oils are a very small slice of MyPyramid. Oils are not a food group, but you need some for good health. You can get your oils from fish, nuts, and liquid oils such as corn oil, soybean oil, and canola oil.

Look at your food tag. There is a nutrient symbol that tells you one of the major nutrients in that food.

- If you have a tag with an **orange** border, you are a grain.

  Tags that are orange have a "B" on them for vitamin B. Vitamin B helps unlock the energy in your other foods. MyPyramid says it's important to "make half your grains whole." Ask each student with an orange tag to identify his or her food.
- If you have a tag with a **green** border, you are a vegetable.

  Tags that are green have an "A" on them for vitamin A. Vitamin A helps us see well.

  MyPyramid says to "vary your veggies" by eating dark green and orange vegetables. Ask each student with a green tag to identify his or her food.
- ➢ If you have a tag with a red border, you are fruit.
  Tags that are red have a "C" on them for vitamin C. Certain fruits contain vitamin C. Vitamin C helps heal cuts. MyPyramid reminds you to "focus on fruits." Ask each student with a red tag to identify his or her food.
- If you have a tag with a **blue** border, you are a milk product.

  Tags that are blue have a "CA" for calcium. Calcium helps us build strong bones and teeth.

  MyPyramid reminds you to "get your calcium-rich foods." Ask each student with a blue tag to identify his or her food.
- ➤ If you have a tag with a purple border, you are from the meat & beans group. Tags that are purple have a "P" on them for protein. Protein helps us build strong muscles. MyPyramid says that it's important to "go lean with protein." Ask each student with a purple tag to identify his or her food.

Now that you are a food, let me tell you about your trip through the body. In the mouth you will get chewed and swallowed and go down the esophagus to the stomach. But we're just pretending! --- You won't really get chewed and swallowed! In the stomach you'll mix with digestive juices and break into smaller parts. In the small intestine you'll become a tiny, tiny part called a nutrient and be absorbed into the blood stream. After you're in the blood stream, you'll be able to visit the heart, lungs, bones, muscles and skin.

You're going to learn why it is important to make wise choices to keep you healthy, like eating right and being physically active. Watch for pictures of Power Panther as you go into all parts of the body. Power Panther's motto is **EAT SMART. PLAY HARD.** Let's say it together. **EAT SMART. PLAY HARD.** 

We have five senses. What are they?

Wait for responses.

Touching Seeing Hearing Smelling Tasting

Each of these five senses is important. Each of them helps us make wise choices.

One of the 5 senses is tasting. Do you know how you taste your food? *Wait for responses*.

We have taste buds on our tongue that tell us when foods are salty, bitter, sweet and sour.

At each of the body stations you'll be visiting, there will be someone to tell you about that body part. Please listen quietly and be respectful to the presenters and each other. The next stop in our Body Walk will be the mouth. As you enter the mouth, look at the tongue on the floor.

### Station 3 - Mouth

#### **Key Concept**

Power Panther says, EAT SMART. You need a healthy mouth to enjoy your food.

#### **Key Outcomes**

Students will be able to:

- Explain the importance of a healthy mouth (teeth, gums and tongue).
- Explain how to floss and brush properly.
- Identify foods that should be limited.
- Identify foods that build strong teeth.
- Identify foods that are good for gums.
- State that tobacco products can harm teeth, gums and mouth.

#### **Station Description**

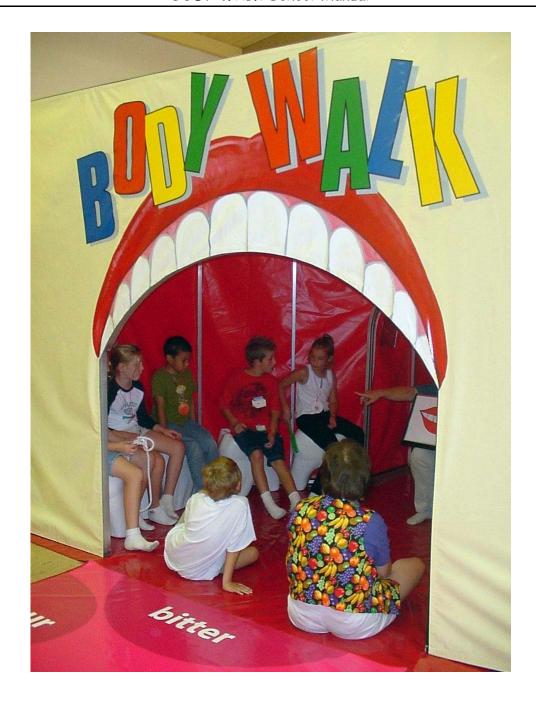
Students enter the domed Mouth Station by walking across a large tongue. The tongue has areas marked with different taste buds. Inside the mouth, students will sit on stools shaped like teeth. If there are not enough stools for all students, ask remaining students to sit on the floor.

#### **Suggested Costume for Presenter**

White lab coat to represent a dentist

Station 3 - Mouth Flipbook	
Graphics	Script
	Welcome to the mouth! Please sit down on one of the teeth.
Body with mouth highlighted	You are here in the body.  Point to the highlighted mouth.
Power Panther brushing and flossing	You need healthy <b>teeth</b> to: <ul> <li>eat chewy or crunchy foods, and</li> <li>help cut up food to be digested.</li> </ul> <li>You need healthy <b>gums</b> to hold your teeth in.</li> <li>You need a healthy <b>tongue</b> to enjoy the taste of your food.</li> To keep your teeth, gums and tongue healthy, it's important to floss and brush after meals and snacks. There's a "right" way
	to brush and floss your teeth.  Tell students to look at the drawing of Power Panther brushing and flossing.
A smile	Let's use my big toothbrush to brush these big teeth you're sitting on.
	Show toothbrush.  You should always brush your teeth in circles. This helps the bristles get between the teeth.
	Demonstrate brushing in circles on teeth (stools) or ask a student to demonstrate.
	A toothbrush, even one this big, can't reach all of the tiny food pieces that get stuck between the teeth. So after you brush, you also need to floss your teeth.
	Ask for two volunteers to hold each end of the rope (floss). Instruct them to put the rope on the floor between two teeth (stools) and pull the rope gently up and down.
Popular foods with a high sugar content "X" across foods	Sticky sugary foods (like candy), sweet drinks (like pop and kool-aid) and gum all contribute to tooth decay. It's OK to have sticky, sugary foods sometimes, but not everyday. Let's look at how much sugar is in some of your favorite foods.  Show sugar tubes and tell the amount of sugar in each of the foods (Coke, 4 Starbursts, Frosted Pop-Tart.)

Station 3 - Mouth Flipbook	
Graphics	Script
Power Panther surrounded by low-fat dairy foods such as low-fat milk, yogurt, low-fat	Do you know what foods help build strong teeth? (milk products)
cheese	Look at your food tag and raise your hand if you are a food from the milk group. (Cheddar cheese, Swiss cheese, low fat milk or yogurt))
	There are other foods that also help build strong teeth. Some of these include broccoli and canned fish like salmon.
	What nutrient is in these good foods that helps build strong teeth? (calcium)
Power Panther showing his healthy gums	When you eat vitamin C, it helps you have healthy gums. Power Panther is showing you his healthy gums. Many fruits and vegetables have vitamin C. Raise your hand if your food tag has a fruit or vegetable on it.
	Besides eating the right foods and brushing and flossing, there are other ways that we can keep our mouth healthy. If you want to have a healthy mouth, avoid all tobacco products.
	Show Mr. Gross Mouth This is Mr. Gross Mouth. Would you want your mouth to look like this from using tobacco products? Point out sores in mouth caused from tobacco products.
	Each of you has a mouth that looks much nicer than Mr. Gross Mouth. Keep your mouth looking nice and healthy!
A healthy mouth and sparkling smile	You are now ready for your trip through the esophagus into the stomach.
	Point out narrow walkway to the stomach. Instruct students to look at their own smile in the mirrors as they leave the mouth.



Students sit on teeth inside the mouth dome

## Station 4 - Stomach

#### **Key Concept**

Power Panther says, EAT SMART. Digestion begins in the mouth and continues in the stomach and small intestine.

#### **Key Outcomes**

Students will be able to:

- State why we need to eat foods from the different MyPyramid groups.
- Describe the digestive action that takes place in the stomach.

#### **Station Description**

Students enter the domed Stomach Station by passing through the esophagus from the mouth. The stomach floor features a large MyPyramid illustration.

#### **Suggested Costume for Presenter**

Tent dress or garbage bag with food labels, magazine pictures of foods, or food models attached all over

Station 4 - Stomach Flipbook	
Graphics	Script
	Welcome to the stomach! Look at your food tag and sit near your MyPyramid group.
Body with stomach highlighted	You are here in the body.  Point to the highlighted stomach.
Mouth, esophagus, and stomach	You just came from the mouth. You didn't just drop down here into the stomach. You were squeezed through a tube from the mouth to the stomach called the esophagus.
Foods breaking into small parts inside the stomach	Digestion means "to divide". When food is digested, it is divided into smaller and smaller parts so the body can use it. Your stomach grinds the food into small pieces and digestive juices help break the food apart. The stomach is like a stretchy bag that holds the food after it is eaten. When the stomach is empty, it shrinks like a balloon without air.
Favorite foodspizza, taco, banana, spaghetti, carrot sticks  Power Panther face saying, "Yum"	Think of your favorite food. Some of your favorite foods fit into more than one food group, like tacos and pizza. I'm going to name the MyPyramid food groups. Raise your hand when your favorite food fits into the group I name.  Name MyPyramid food groups: Grain group, fruit group, vegetable group, milk group,
Drawing of five nutrient symbols	meat & beans group. Note: Fats and oils are not a food group, but you need some for good health.  Foods from each pyramid group give us different building blocks our bodies need. These building blocks are
Drawing of five flutherit symbols	called nutrients. Our bodies need different nutrients for different jobs in the body. You'll be learning more about nutrients when you visit the small intestine.
	Hold up the protein (P) symbol. This is a symbol for protein. What food groups give us protein? (meat & beans, milk)
	Hand the protein (P) symbol to a student and ask him/her to put the symbol on the meat & beans group.
	Hold up the calcium (CA) symbol. What food group gives us calcium? (milk)

Station 4 - Stomach Flipbook	
Graphics	Script
	Hand the calcium (CA) symbol to a student and ask him/her to put the symbol on the milk group.
	Hold up the vitamin $B(B)$ symbol. What food group gives us vitamin B? $(grain)$
	Hand the vitamin B (B) symbol to a student and ask him/her to put the symbol on the grain group.
	Hold up the vitamin $A$ ( $A$ ) and vitamin $C$ ( $C$ ) symbols. What food groups give us vitamin $A$ and vitamin $C$ ? (vegetables and fruits)
	Hand the vitamin $A$ ( $A$ ) and vitamin $C$ ( $C$ ) symbols to 2 students and ask them to put the symbols on the vegetable group and on the fruit group.
Drawing of a churning stomach	When our food is broken down into smaller pieces in the stomach, there is a "churning" action. This movement mashes and stirs the food while it is broken into small pieces. Let's pretend we're being digested! Watch me first and I'll tell you when to join in.
	Start by standing up, putting your arms out and then stretching and wiggling while you gradually shrink to a squatting position. Have students that have protein (P) on their food tag stand up. Point out that the protein rich foods are in the meat & bean group near the right side of MyPyramid. Have the proteins begin the digestion process. Continue adding other nutrient groups (calcium, vitamin C, vitamin A, vitamin B) until all foods in the stomach have been broken down.  Ask students to sit down.
Drawing of Power Panther with his stomach saying, "Grrrr"	Do you know why your stomach growls? Sometimes your stomach churns when you're hungry and the gases in your stomach make a gurgling sound. Your body gives you hints. It tells you to eat when you're hungry, but STOP when you feel full. The full feeling is a message from your body too! You are now ready for a trip through the small intestine.



# Students learn about digestion in the stomach station

### Station 5 - Small Intestine

#### **Key Concept**

Power Panther says, EAT SMART. In the small intestine, foods are broken into small parts called nutrients and the nutrients travel to all parts of your body.

#### **Key Outcomes**

Students will be able to:

- State what a nutrient is.
- Discuss what happens to food in the small intestine.
- State that food has nutrients that make us grow, provide energy and help us heal.
- Name foods high in fiber.

#### **Key Concept**

Power Panther says, PLAY HARD. Drink plenty of water. Water is an important nutrient needed during exercise. Water helps carry nutrients away from the small intestine to other parts of the body.

#### **Key Outcomes**

Students will be able to:

- State one reason water is needed in the small intestine.
- State why water is important during exercise.
- State how much water they should drink each day.

#### **Station Description**

Students enter the domed Small Intestine Station from the stomach. This station is a 20-foot long tunnel. Once inside, students will sit on the floor about 2/3 of the way into the tunnel. The interior of the small intestine has "villi" hanging from the ceiling.

#### **Suggested Costume for Presenter**

Exercise clothing (such as sweat pants) for active sports, bottle of water

Station 5 – Small Intestine Flipbook	
Graphics	Script
	Welcome to the small intestine. Please sit down.
Body with small intestine highlighted	You are here in the body.  Point to the highlighted small intestine.
Power Panther with nutrients going to all parts of his body	The small intestine squeezes food along like toothpaste is squeezed through a tube. Here in the small intestine the pieces of food broken down in the stomach become even smaller. The tiny pieces of foods are called nutrients. Nutrients move through the walls of the small intestine (point to sides of exhibit) and then travel in the bloodstream to all parts of the body. After the nutrients reach all parts of the body, they have many different jobs. They help give us energy, help us grow and help us heal.
Villi in the intestine	Point out strips hanging from the ceiling.  These are called villi (vil-lī). We all have villi in our small intestine. The villi are not just on the top of the intestines inside our body, but also on the sides and bottom. The villi absorb the nutrients from our food. The nutrients get between the villi and then go through the intestinal wall into the blood stream. Villi are like doors in the walls of the intestine. The villi in your body are tiny and hair-like.
Child and house	Do you know how long your small intestine is? Wait for responses.  About 20 feet!!! If your small intestine wasn't curled up inside of you, you would have to be about as tall as a two-story house for your "stretched out" intestines to fit inside your body.  Ask for a volunteer to help you demonstrate how long your intestines are (20 feet). Ask the student to take the end of the rope that is sticking out of the container. Instruct them to pull slowly until all 20 feet of the rope are on the floor.
Power Panther showing that 60% of his body is made up of water	Did you know that 60% of your body is water and that you need to constantly replace it? Do you know how much 60% is? That's more than half! You lose water when you sweat, so it's important to drink lots of water when you're running and playing.

Station 5 – Small Intestine Flipbook	
Graphics	Script
Nutrients going through intestinal wall to show absorption	Water also helps the nutrients move to all parts of your body.
	I'm going to set some glasses of pretend water here.
	Start by Velcroing one glass onto the board.  Continue to add one more glass and ask students to tell you when you have set out the correct number of glasses of water needed daily. Eight glasses are needed.
Power Panther with 8 glasses of water	Every day you need at least 8 glasses of fluid. Drinking water is the best way to get the fluid you need. Raise your hand if you think you drink 8 glasses of fluid everyday. Is it OK to drink soda pop instead of water?
	(No. It's OK to have milk or juice instead of water sometimes but we need to limit the amount of soda pop we drink.)
Fruits, vegetables and whole grains	For our small intestine to be healthy, we also need fiber in our diet. Fiber helps remove waste from our body. We get fiber from eating lots of fruits, vegetables and whole grains.
	Ask students to stand. When the bell rings, you may walk slowly to the end of the small intestine. Walk slowly so you can be absorbed into the bloodstream and travel on to the heart.



## Students inside the small intestine

### Station 6 - Heart

#### **Key Concept**

Power Panther says, EAT SMART. Low-fat foods are good for your heart.

#### **Key Outcomes**

Students will be able to:

- Feel their heart beat.
- Explain the function of the heart and why the pumping action of the heart is important.
- Name heart-healthy foods.

#### **Key Concept**

Power Panther says, PLAY HARD. Exercise keeps your heart healthy.

#### **Key Outcomes**

Students will be able to:

- State what may happen to blood vessels if the diet is too high in fat.
- State what happens to the heart during exercise.
- ldentify two things they can do to keep their heart healthy.

#### **Station Description**

Students will enter the enclosed heart station from the small intestine tunnel. The Heart Station has an open floor area with wall panels.

#### **Suggested Costume for Presenter**

Colorful hearts on clothing or accessories, paper heart cutouts pinned on clothing, pink or red clothing

Station 6 – Heart Flipbook	
Graphics	Script
	You have just entered the heart. You are here in the body. <i>Point to highlighted heart on wall panel</i> . We're going to talk about why your heart needs to be healthy.
	Where is your heart?  Wait for responses.  Your heart is in the center of your chest.
	Show heart model.
	This shows what the heart in your body looks like. Do you know how big your own heart is?  (About the size of a fist.)
A "pumping" heart and a hand on a squeeze bottle	The heart muscle squeezes each time your heart beats and makes the heart act like a pump. When the walls of the heart squeeze together they pump blood, just the way you can squeeze water out of a plastic squeeze bottle.
Heart showing four chambers	Your heart has 4 sections called chambers.  Point to drawing on wall panel.  Your blood moves through all of these chambers.
Power Panther with heart-healthy foods	Look at your food tag. All of these foods are hearthealthy. Eating heart healthy foods, in the right amounts, reduces the risk of heart disease.
Power Panther eating toast	Too much fat in the diet is unhealthy for the heart and may cause clogged blood vessels.
	Show fat tubes as you describe foods.  This is the amount of fat in a Big Mac and this is the amount of fat in a grilled chicken sandwich. This is the amount of fat in one small order of fries. This is how much fat is in one small scoop of ice cream. Compare this to the fat in the same amount of frozen yogurt.
	If you eat too much fat, arteries may become clogged with fat and your heart doesn't work properly.

Station 6 - Heart Flipbook	
Graphics	Script
Power Panther checking his pulse	When you feel your pulse, you are really feeling your heartbeat.
	Ask students to put their fingertips on their neck, just below their ear and slightly under their jawbone, to find their pulse.
Children engaged in vigorous physical activity	What happens when you exercise? (Your heart beats faster. You can hear it or feel it in your pulse.)
	Ask for a student volunteer to hold the pulse stick. Let others in the group read the number on the pulse stick.
	What does this number tell us? (How many times your heart beats each minute)
	The heart flashes on the pulse stick each time your heart beats.
	Ask all students to jump up and down 10 times, then find their pulse again. Have the student volunteer grip the pulse stick and look at the reading again.
	What happened? Why? (Heart rate increased, because you were exercising your heart)
	Is exercise good for your heart? Wait for responses. Yes, when you exercise, you build heart muscle. When you exercise regularly, your heart stays healthy and strong. A strong heart muscle lets you play hard.
	The next body part you're going to visit is the lungs.



# Students learn how to have a healthy heart

# Station 7 - Lungs

#### **Key Concept**

Power Panther says, PLAY HARD. Healthy lungs help you breathe faster when you run and play.

#### **Key Outcomes**

Students will be able to:

- Explain how lungs function to help keep the body healthy.
- State what smoking does to the lungs.
- Tell why second-hand smoke is harmful.
- Name factors that are important in keeping lungs healthy.

#### **Station Description**

Students enter the enclosed Lungs Station from the Heart Station. The Lungs Station has an open floor area with wall panels.

#### **Suggested Costume for Presenter**

Exercise clothing (such as sweat pants) for active sports, bottle of water

Station 7 – Lungs Flipbook	
Graphics	Script
	You are now in the lungs. You are here in the body.  Point to highlighted lungs on wall panel.
Power Panther showing location of lungs	Where are your lungs located in your body? (Upper chest) Put your hands over your lungs. Lungs take the oxygen from the air you breathe and pass it to the blood so it can go to all parts of your body. We get new oxygen from the air each time we breathe IN. And we get rid of waste gas (carbon dioxide) each time we breathe OUT.
	You just learned in the heart that the heart beats faster when you exercise. You breathe faster too. When you breathe faster, your lungs work harder. Playing hard helps keep your lungs healthy just like it keeps your heart healthy. Healthy lungs help you breathe faster and better.
Power Panther comparing his pink tongue to his pink lungs	Let's see what a healthy lung should look like.  Show healthy lung.
	What color are your lungs? (pink- like tongue)
	How can you keep your lungs pink? (Don't smoke!)
A smoker's lung	What happens to your lungs when you smoke? Lungs turn dark gray from tars and nicotine in the smoke. Smoking causes lung disease and you aren't able to breathe as well.
	Show lung of someone who smokes.
Second-hand smoke drifting to a child	Is it harmful to be around other people who are smoking? Yes, smoke from someone else's cigarette, cigar, or pipe is called second-hand smoke. It can affect or hurt people that don't smoke. Tobacco smoke contains hundreds of poisons that circulate in the air. These can be inhaled by anyone nearby.
Power Panther breathing through a small straw in his mouth	Emphysema is a lung disease that is often caused by smoking. Emphysema makes it almost impossible to breathe. The disease puts holes in the lungs, making breathing like trying to blow up a balloon with holes in it.

Station 7 – Lungs Flipbook	
Graphics	Script
	Give each student a small straw. Instruct them to put the straw in their mouth, but don't chew on it. Have students pinch their nostrils together with one hand and breathe through the straw in their mouth as long as they can.
	This is what breathing would be like if you had emphysema. Do you think you could live a normal life if you had emphysema? $(No)$
	You couldn't even ride your bike, skateboard or run.
	Ask students to put straws in wastebasket.
Pollution	The air you breathe is often polluted with smoke, germs and dirt. Your lungs try to clean up as much of the air as they can when you breathe in.
	Here are some things you can do to keep your lungs healthy.  > Don't smoke  > Ask others not to smoke around you  > Carpool  > Stay away from air pollution
	The next body part you're going to visit is the bones.



# Students learn about healthy lungs

### Station 8 - Bones

#### **Key Concept**

Power Panther says, EAT SMART. Bones provide the framework for the body and calcium in milk builds strong bones.

#### **Key Outcomes**

Students will be able to:

- State a function of bones.
- Name foods that will help build strong bones.
- Name a nutrient that is needed for strong bones
- State how many servings from the milk group are needed each day.

#### **Key Concept**

Power Panther says, PLAY HARD. Exercise helps build strong bones.

#### **Key Outcome**

Students will be able to state that exercise helps build strong bones.

#### **Station Description**

Students enter the enclosed Bones Station from the Lungs Station. The Bones Station has an open floor area with wall panels.

#### **Suggested Costume for Presenter**

A hard hat is provided. Other clothing might include carpenter overalls and/or tools.

Station 8 – Bones Flipbook	
Graphics	Script
	Volunteer facilitator wears hardhat (provided).
	You are here in the body.  Point to highlighted bones on wall panel.
	I am wearing a hard hat because I am building something. What do you think I am building? (strong bones)
Power Panther building strong bones	Do I really build strong bones by wearing my hard hat? $(No)$
	We build strong bones by eating a variety of foods that are high in calcium. The milk group supplies nutrients needed for strong bones. Skim milk or low-fat dairy products have all of the nutrients you need, but not the extra fat. What are some foods in the milk group that are good sources of calcium? (milk, yogurt and cheese) Show carton of milk.
	Some vegetables like spinach and broccoli also supply nutrients for strong bones. Calcium, vitamin D and protein are all important for maintaining strong bones. We also build strong bones by being physically active.
	Our bones change all the time. So when we build strong bones it doesn't mean they will stay strong forever. We need to continue to eat calcium-rich foods all our life. If we don't, bones become brittle and can break easily.
Power Panther with a calcium symbol	Look at your food tag. If you're a good source of calcium, raise your hand. If you have the calcium (CA) symbol, you are a food high in calcium. All of these foods will help us build strong bones.
Pop Can	Point to the soda pop can on the other side of the flipbook.
	Will the soda pop in this can work instead of milk to build strong bones? $(No)$
	No! Soda pop doesn't have the nutrients needed to build strong bones.

Station 8 – Bones Flipbook	
Graphics	Script
Power Panther with a sign	Velcro the milk carton, slice of cheese and yogurt container to the bone graphic on the wall panel.
	How much milk do you need everyday? (3 servings) Can part of the 3 servings come from other dairy products?
	Wait for responses.
	Yes, it's OK to have 2 glasses of milk and a carton of yogurt OR 1 glass of milk, a carton of yogurt and a piece of cheese.
Power Panther showing his	Our bones are covered with muscle, fat and skin.
skeletal system	Instruct students to feel their ear lobe.
	What does it feel like? (soft) If you didn't have strong bones, your whole body would feel like your ear. You'd be like a bowl of jelly!
	Our bodies have 206 bones in them. This framework is called our skeleton. Our bones are long, short, round, flat, big and little. About 100 of our bones are in our hands and feet. Our smallest bone is in our ear and it is smaller than a grain of rice.
	Show cow bone and skull model.
	This is a real cow bone. Your bones look like this, but they are smaller. This is a model of a skull.
Power Panther on a skateboard	Physical activity helps build strong bones. When you run and play, ride your bike or skateboard, your bones use the calcium in your body to grow and stay strong.
	Your bones can't move by themselves. Bones are attached to muscles and muscles move the bones. So, the next body part you're going to visit is the muscles.



# Students learn how to have healthy bones

## Station 9 - Muscles

#### **Key Concept**

Power Panther says, EAT SMART. Foods with carbohydrates provide fuel for exercising muscles, and protein helps build muscle tissue.

#### **Key Outcomes**

Students will be able to:

- Name two nutrients that are especially important for exercising muscles.
- Name foods that provide carbohydrates.
- Name foods that provide protein for building muscle tissue.

#### **Key Concept**

Power Panther says, PLAY HARD. Exercise increases muscle strength and lets you play longer.

#### **Key Outcome**

Students will be able to describe an activity that exercises muscles.

#### **Station Description**

Students enter the enclosed Muscles Station from the Bones Station. The Muscles Station has an open floor area with wall panels.

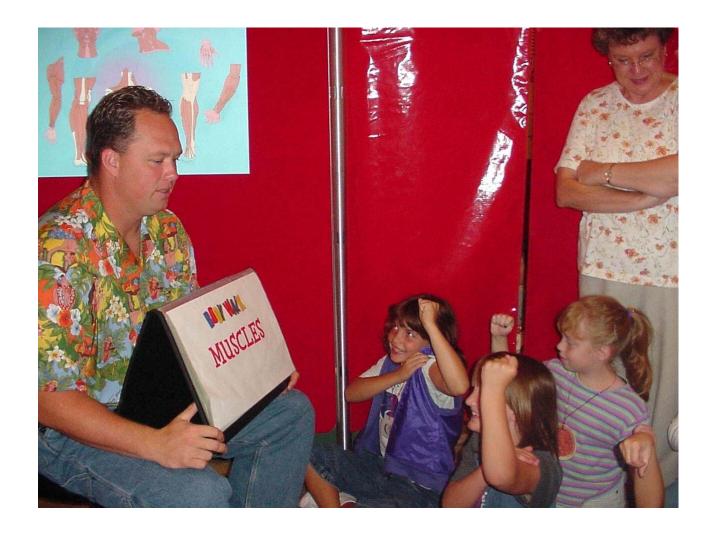
Note: Latex Dynabands are used in this station. Please inform Body Walk manager if you have students with latex allergies.

#### **Suggested Costume for Presenter**

Padding in upper sleeve to make an exaggerated fake arm muscle Exercise clothing (such as sweat pants) for active sports; bottle of water

Station 9 – Muscles Flipbook	
Graphics	Script
	You are now in the muscles. You are here in the body.  Point to highlighted muscles on wall panel.  Show me your strong muscles.
	(Flex your arm muscle as the students flex theirs.)
	Very good! You DO have strong muscles! How did you get your strong muscles? (Eating healthy foods and exercising)
Power Panther flexing his muscles	Muscles help us move. Some muscles are attached to bones and move the bones. You've already learned about a muscle that pumps blood. What was that muscle called? (heart)
Muscles in the body	Did you know we have 636 different muscles? Our muscles are different sizes. We have large muscles, small muscles and medium size muscles.
	Show muscle replica. This is what one pound of muscle tissue looks like in our body.
	Show fat replica. This is what one pound of fat looks like in our body. Which do you think is healthier? (muscle)
	Hand all students a turtle beanbag. Instruct them to squeeze and watch the muscles in their hand and arm move.
Pork chop, cheese, muffin, green beans and banana	Look at these healthy foods.  Point to graphic on other side of flipbook.
	Some of these provide a nutrient called protein that helps build strong muscles. Can you tell me which ones build strong muscles? (pork chop (meat & beans group) and cheese (milk group)).
	Our muscles need foods from the grain, vegetables and fruit groups, too. The nutrients we get from these foods are called carbohydrates. We need carbohydrates to provide fuel when our muscles are exercising.

Station 9 – Muscles Flipbook	
Graphics	Script
	Ask students to identify which group the foods on the flipbook fit into (pork chop in meat & beans, cheese in milk, muffin in grains, green beans in vegetable and banana in fruit.)
Power Panther holding MyPyramid on a platter	Carbohydrates come from breads, pastas, fruits and starchy vegetables. Raise your hand if you have a food tag that provides carbohydrates. Raise your hand if you have a food tag that provides protein. Protein comes from the meat & beans group and the milk group.
Power Panther giving clues	There's something else we need to give our muscles. Does anybody have an idea what that might be?  If students don't know, give them this clue: It's something you drink.  Water! Our muscles need lots of water!
Power Panther engaged in several different physical activities	Physical activity is also important for our muscles. Tell me some examples of a physical activity that exercises muscles. (Wait for responses and accept almost any activity—running, riding bike, riding skateboard, swimming, etc.)  Now we're going to stretch our muscles.  Instruct all students to stand. Give each student a stretchy dynaband. Have students hold one end of the band in each hand and stand on the middle of the band. Pull up with both hands to stretch arm muscles. Lean to the left, then the right to stretch muscles. When finished, collect dynabands.  You have one more stop in the bodythe skin. Are you ready to move to the skin?



# Students show their strong muscles

### Station 10 - Skin

#### **Key Concept**

Power Panther says, EAT SMART. Nutrients in our food help the skin heal itself.

#### **Key Outcomes**

Students will be able to:

- State a function of skin.
- State how to care for the skin by eating foods with protein and vitamin C.
- Explain the importance of frequent hand washing.

#### **Key Concept**

Power Panther says, PLAY HARD. Outdoor exercise helps build a strong body.

#### **Key Outcomes**

Students will be able to:

- Describe what happens if skin is exposed to the sun too long.
- State two ways to care for the skin on the outside.

#### **Station Description**

Students enter the enclosed Skin Station from the Muscles Station. The Skin Station has an open floor area with wall panels. Students exit the body through a cut in the skin. The exit curtain has a "cut" on the inside of the "skin" and a Band-Aid on the reverse side of the "skin".

#### **Suggested Costume for Presenter**

A large straw hat will be provided. Sunglasses, an oversized bottle of sunscreen or a beach towel could also be used as props.

Station 10 – Skin Flipbook	
Graphics	Script
	Volunteer facilitator wears straw hat.  You are now on the inside of the skin.  Point to highlighted picture of skin on wall panel.
	We're going to talk about how important it is to take good care of our skin on both the inside and the outside. After we're done here, you will be able to leave the body through a cut in the skin.
Power Panther checking out his protective covering	Skin is a protective covering for the body. It covers all of the other body parts you've visited. It helps protect your muscles, your bones, your heartall of your body parts. You need to take good care of your skin.
Power Panther putting a Band- Aid on a cut	One way we can take good care of our skin is by avoiding cuts, scrapes and bruises. But if we do injure our skin, it's important to keep cuts clean and covered.
Power Panther eating strawberries	In the muscles you learned that protein is important to build strong muscles. But protein is important for your skin too. Protein and vitamin C help heal cuts in the skin. Do you remember which foods are high in protein? Wait for responses.
	Right! Protein comes from the meat & beans group and the milk group. Where do you think vitamin C comes from? <i>(fruit group)</i>
	Use food models and show foods that are good sources of vitamin C. The body doesn't store vitamin C so you need to eat foods with vitamin C every day.
Hands being washed with soap and water	If we wash our hands often, we can help keep the skin on our hands clean. Clean hands help protect the food we eat. Even if we try to keep our hands clean, it's very easy to get germs from someone else. Let's look at how we pass germs from one person to another.
	Ask for a volunteer to have "pretend" germs applied to their hand. Explain that it doesn't hurt and it's really not germs. Ask child to hold up hand. Apply "germs" lightly to the palm of child's right hand.

Station 10 – Skin Flipbook	
Graphics	Script
	Can anyone see the pretend germs? No, they are just like real germs. They are too small for us to see.
	Ask child to put that hand under the black light and ask other children to look at the pretend germs. Now ask two other children to put their hands under the black light. Do they have the germs? No. Now ask the first child to shake hands with the two other students. All children should now put their hands under the black light and look at the "germs". Point out how easily germs were spread just by shaking hands.
Child with too much sun exposure	Point to poster of girl. This girl is sunburned. Too much sun can hurt the skin. Wearing sunscreen helps protect the skin. How many of you use sunscreen? (Wait for a show of hands.)
	It's a good idea to wear sunscreen whenever you are in the sun. Don't forget your face, neck and the tops of your ears! Wearing a big hat and long sleeves will also protect our skin from the sun.
Power Panther riding a skateboard and wearing a helmet, knee pads and elbow pads	There are other ways we can protect our skin. Look at Power Panther. Can anybody tell me how he is protecting his skin? (Wearing a helmet, knee pads, elbow pads)
	That's right! We need to wear a helmet and knee and elbow pads anytime we are doing an activity where we could fall, or scrape or cut our skin.
	Now you're ready to leave the body through that cut in the skin.
	Point to cut in skin where students will exit this station.
	When you get to the other side, be sure to turn around and look at the Band-Aid on the outside of the skin. As you leave, you will travel along Power Panther's Pathway to Life to help you remember everything you've learned today.



# Students learn how to keep skin healthy

Station 11 - Pathway to Life	
Graphics	Script
Power Panther with bubble sayings over his head	<ul> <li>Some of the things you learned in the brain were:</li> <li>Always wear a helmet when you PLAY HARD.</li> <li>Choose a variety of foods from MyPyramid</li> <li>When you are hungry your stomach growls. Your stomach also tells you when you are full. It's important to choose the right amount of food at each meal and not eat too much or too little.</li> </ul>
Power Panther with milk	How many glasses of milk do you need each day? (3 glasses) Why do you need to drink milk? (It gives you strong bones and teeth)
Power Panther saying "no" to cigarettes	You also learned that tobacco products hurt your mouth, teeth and gums.
Power Panther brushing and flossing	What else is important to do to keep your mouth healthy? (Brush and floss)
Power Panther surrounded by foods with nutrient symbols and stomach with food broken up inside	When you were in the stomach, you talked about the important nutrients you get from the different food groups in MyPyramid. You also learned that food is broken into smaller pieces in the stomach.
Small intestine	In the small intestine the food becomes even smaller pieces called nutrients. How long is your small intestine? (Approximately 20 feet)
Power Panther drinking water	It is important to eat fiber and drink a lot of water to keep you healthy. How many glasses of water should you drink each day? (8 glasses)
Power Panther surrounded by heart healthy foods	Power Panther is reminding you of some heart healthy foods.
Power Panther using the pulse stick	Here's Power Panther using a pulse stick just like you did in the heart!
Power Panther with lungs Power Panther saying "no" to cigarettes	In the lungs you learned that to have healthy, pink lungs, it's important to not smoke. You need to breathe in as much fresh, healthy air as you can.
Power Panther breathing fresh air	What color will your lungs turn if you smoke? (Black, gray, or brown)

Station 11 - Pathway to Life	
Graphics	Script
Power Panther with milk	We get calcium from drinking milk and eating dairy products. Calcium helps us build strong bones and teeth.
Power Panther with skeleton and riding a skateboard	Exercise also strengthens our bones. How much exercise do we need each day? (1 hour)
Power Panther flexing, surrounded with foods and eating strawberries	Power Panther is showing you his strong muscles. Foods from the meat & beans group help build muscle. What is the nutrient we get from the meat & beans group? It starts with a P(protein).
Power Panther saying "ooosmooth"	Power Panther is showing you his smooth, healthy skin.
Washing hands	Why is it important to wash your hands? (To get rid of the germs) The two most important times to wash your hands are before you eat and after you use the restroom.
Bottle of sunscreen	Power Panther always uses sunscreen when he goes outdoors.
	Did you enjoy your Body Walk today?



Chapter 5, Pathway to Life Station - Page 42