CHAPTER 5

INFORMATION FOR STATION PRESENTERS

BODY Venture™
CHAPTER 5: STATION PRESENTERS

Station 1: School Lunchroom

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Station 6: Heart

Station 7: Lungs

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Survey Activity
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 Venture. 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 will tour the human body exhibit with Power Panther graphics as a guide. Throughout the exhibit, they will learn how to apply Power Panther’s slogan:

**EAT SMART. PLAY HARD.**

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

- Familiarize yourself with the script prior to Body Venture. 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 some eye contact with the students and encourage everyone to participate.
- Don’t allow the children to engage you in conversation or you will not be able to complete the entire script. Suggested response: “That sounds like a great idea/comment/question, so please bring that up later in your classroom.”
- 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.
- Ensure students handle the exhibit props carefully. Some exhibit props are not to be handled by students at any time. 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 other than clear, unflavored, water allowed inside the exhibit.

SOCKS MUST BE WORN BY PRESENTERS.
NO SHOES OR BARE FEET ALLOWED IN EXHIBIT!
Notes
STATION 1: SCHOOL LUNCHROOM

**Key Concept:**
Power Panther says, **EAT SMART. PLAY HARD.** You always **EAT SMART** when you make healthy food choices from MyPlate.

**Key Outcomes:**
Students will be able to:
- Identify the five food groups from MyPlate.
- Give examples of foods from each MyPlate group.

**Station Description:**
The school lunchroom is a separate structure from the other body stations. In the school lunchroom, students will be introduced to Power Panther and his **EAT SMART. PLAY HARD.** message. Students will receive a food tag bookmark and will become a “food” such as a carrot, low-fat milk or a piece of chicken. They will learn about MyPlate and how important it is to **EAT SMART** by choosing foods everyday from each of the food groups.

**Suggested Costume for Presenter**
- Borrow a chef’s hat or hair net from a school food service professional in your school!
- A Body Venture apron is provided.
CHAPTER 5 • INFORMATION FOR STATION PRESENTERS

STATION 1: SCHOOL LUNCHROOM

**Graphics**

**Script**

*Give students a food tag as they enter.*

“Power Panther welcomes you to the Body Venture lunchroom! You’re not here today to EAT food… you ARE food!”

“Your food tag tells you what food you are. Keep your food tag with you and when you finish today, use it as a bookmark.”

“The food on your food tag comes from one of the five food groups. Let’s look at MyPlate as we talk about each food group.”

*Point to MyPlate.*

“MyPlate says it’s important to ‘make half your grains whole’ by eating foods like whole wheat bread. Raise your hand if you have a food tag with an orange border.”

*Ask each student with an orange tag to identify his or her food. As students name their foods, point to the ORANGE/GRAIN pie piece on MyPlate.*

“The pictures here (point to front of flip book) show foods in the grain group.”

“If you have a tag with a GREEN border, you are a vegetable. MyPlate says to add more vegetables to your day. Who has a tag with a GREEN border?”

*Ask each student with a GREEN tag to identify his or her food. Repeat procedure as with GRAINS.*

“Look at the vegetable pictures on MyPlate. It’s important to eat enough dark green and orange vegetables.”

“Brighten your plate with vegetables that are red, orange, purple and dark green. Try butternut squash, red radishes and purple eggplant.”

“Food tags with RED borders represent the fruit group. Who has a tag with a RED border?”

*Ask each student with a RED tag to identify his or her food. Repeat procedure as before.*
STATION 1: SCHOOL LUNCHROOM

Graphics

Script

“Raise your hand if you have a tag with a **BLUE** border. You are dairy products!”

Ask each student with a **BLUE** tag to identify his or her food. Repeat procedure as before.

Point to pictures on flipbook.

“You can see that there are dairy products like cheese and yogurt in this group in addition to the milk that we drink. If you are lactose intolerant, try soy milk.”

“If you have a tag with a **PURPLE** border, you are from the protein group. Who has a tag with a purple border?”

Ask each student with a **PURPLE** tag to identify his or her food. Repeat procedure as before.

Point to pictures on flipbook.

“Beans, like baked beans, eggs and nuts and seeds are also included in the protein group.”

“Fats and oils are not shown on MyPlate because they are not considered a food group, but we do need some fat in our diets. Some foods, such as fish, nuts and avocados naturally contain healthy types of fat. Get your fats most often from these sources and limit foods with added fats.”

“As you travel on your Body Venture today, Power Panther has an important message for each of you… **EAT SMART. PLAY HARD.** Say it with me. **EAT SMART. PLAY HARD.**

Remind children not to shout the motto.

“At each of the stations you visit, there will be someone to tell you about that part of the body. Please listen quietly and be respectful to the presenters and each other.”

Tell students to follow poly-spots to the brain.
Notes
STATION 2: BRAIN

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

Key Outcomes:
Students will be able to:

- Give a simple explanation of brain function.
- State that if you super-size meals, you’re eating too much.
- 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. Half of the floor in the Brain Station has a “squishy” foam material to resemble brain matter. There is a firm path from ear to ear inside the brain to ensure that it is wheelchair accessible. There are two battery-powered strobe lights to simulate “brain impulses.” Please inform the Body Venture manager if there are students with migraine and/or seizure disorders triggered by strobe lights.

Suggested Costume for Presenter
- Surgical scrubs
- A safety vest is provided.
- A “Superbrain” cape is provided.
<table>
<thead>
<tr>
<th>Graphics</th>
<th>Script</th>
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<tbody>
<tr>
<td><img src="image" alt="Brain Graphics" /></td>
<td>“Please come in and sit on the soft floor of the brain.”</td>
</tr>
</tbody>
</table>
| ![Brain Graphics](image) | “You use your brain everyday to make important choices in your life. Your brain sends messages to all parts of your body and controls everything your body does.”

*Point to strobe lights.*

“Each of these flashes is like a message from your brain to all parts of your body. The messages are carried by nerves.”

| ![Brain Graphics](image) | “Your brain is soft like the floor of the brain you are sitting on. Your skull helps protect your brain.”

*Show brain model. DO NOT PASS MODEL AROUND TO STUDENTS.*

| ![Brain Graphics](image) | “Your brain is the boss of your body. It lets you feel, think, learn and remember.

Each side of your brain is in charge of different kinds of thoughts and actions. The left side of your brain is used for speech and for things you have to do in a certain order like tying your shoe laces. The right side of your brain is for thinking in pictures. If you had to draw a map of the way you go to school, you would think about the map using the right side of your brain.”
**Graphics**

“You have five senses. They send information to your brain about the outside world. Each of the five senses is important as they help us make wise choices.
The five senses are: touching, seeing, hearing, smelling and tasting.”

**Script**

“You brain also helps you decide how much you need to eat. Look at these foods.”

*Show small serving of French fries.*

“This is a serving of French fries.”

*Show large serving of French fries.*

“This is the amount of fries you get when you super-size your meal. When you super-size your meal, you are eating too much.”

*Hold up some bagged, plastic food models (except the French fries) and say,*

“Do you eat this much or do you eat more or less at one time? Each of these bags shows the right size serving for kids your age.”

“Raise your hand if you eat breakfast.”

*Wait for responses.*

“Breakfast is important because it gives your brain energy to ‘jump start’ your day. Your body needs food to give you energy to think during the morning at school.”

“We’ve talked about **EATING SMART** to help our brain. What else can we do to protect our brain?”

*Wait for responses. Show bicycle helmet.*

“Wear a helmet! A helmet protects your brain from injury. Before we leave the brain, tell me Power Panther’s motto.”

*Wait for responses. Remind students not to shout.*

“That’s right, the motto is **EAT SMART. PLAY HARD**. Let’s say it together: **EAT SMART. PLAY HARD**.

Let’s go out of the brain through the other ear.”
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 eaten less frequently.
- Identify foods that build strong teeth.
- 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 tongue.

Suggested Costume for Presenter
- White lab coat to represent a dentist
- A lab coat is provided.
### Graphics

**Graphics:**

- Mouth
- Person

### Script

#### Welcome to the Mouth

“Welcome to the mouth! Please sit down on one of the teeth.”

#### You are here in the body

“You are here in the body.”

*Point to the highlighted mouth on the flipbook.*

#### You need healthy teeth to:

- eat chewy or crunchy foods and
- help cut up food to be digested.

You need healthy gums to hold your teeth in place. You need a healthy tongue to enjoy the taste of your food.

To keep your teeth, gums and tongue healthy, it’s important to brush and floss after meals and snacks. Look at the drawing of Power Panther brushing and flossing.”

#### Let’s use my big toothbrush to brush these big teeth you’re sitting on.

“Let’s use my big toothbrush to brush these big teeth you’re sitting on.”

*Show toothbrush.*

“You should brush your teeth on all sides. This helps to remove decay-causing plaque and bacteria.”

*Demonstrate brushing on teeth (stools) or ask a student to demonstrate.*

“Even a toothbrush this big, can’t reach all of the food that gets stuck between your teeth. In addition to brushing, you 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.*
Graphics  

Script  

“Sticky, sugary foods and sweet drinks like soda pop all contribute to tooth decay. 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 (5 chocolate kisses, large fruit roll-up, 1/3 c. vanilla ice cream and 12 oz. Coca Cola.) **DO NOT PASS SUGAR TUBES TO STUDENTS.**

“Foods from which food group help build strong teeth?”

(Foods from the dairy group)

“Look at your food tag and raise your hand if you are a food from the dairy group.”

(Low-fat cheese, swiss cheese, low-fat milk, low-fat chocolate milk, low-fat cottage cheese or low-fat yogurt)

“There are other foods that also help build strong teeth. Some of these include broccoli and canned fish like salmon.

Calcium is the nutrient in these good foods that helps build strong teeth.”

(Calcium)

“Power Panther is showing you his healthy gums. Fruits and vegetables with vitamin C help you have healthy gums. Raise your hand if your food tag has a fruit or vegetable on it.”

“If you want a healthy mouth, avoid ALL tobacco products.”

*Show Mr. Gross Mouth. DO NOT ALLOW STUDENTS TO TOUCH THE MODEL.*

“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!”

You are now ready for your trip through the esophagus to the stomach.”

*Point out narrow walkway to the stomach.*
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:

- Name the food groups from MyPlate.
- Describe the digestive action that takes place in the stomach.
- Explain why your stomach growls.

Station Description:
Students enter the Stomach Station by passing through the esophagus from the mouth. Wall graphics provide the appearance of being inside the stomach.

Suggested Costume for Presenter
- Tent dress or garbage bag with food labels, magazine pictures of foods or food models attached all over
- A shirt with food models attached is provided.
**Graphics**

“Welcome to the stomach! Please sit down.”

“You just came from the mouth. You didn’t just drop down from the mouth to the stomach. Instead you were squeezed through the esophagus, a tube from the mouth to the stomach.”

“Digestion starts in the mouth and continues here in the stomach. The word digestion means ‘to divide.’ When food is digested it is divided into smaller and smaller parts so the body can use it. In the stomach, several sets of muscles help grind the food into small pieces and digestive juices help break the food apart.”

“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. By the time the food is ready to be squeezed into the small intestine, it’s a mashed up milky liquid.”

“Your stomach can also make sounds while digestion is taking place. If you’ve just eaten, your stomach may sound something like this.”

*Push center play button on the digital voice recorder and play sound for the group.*

“Sometimes when your stomach growls it means you’re hungry. Your body gives you hints that you should listen to. Eat when you’re hungry, but stop when you feel full.”
STATION 4: STOMACH

Graphics

Script

“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. As you eat, your stomach gets larger and larger. If you eat too much food every day your stomach may stretch out like this model (show stretched out pink stomach model), so that it can’t return to its original size like this model (show small un-stretched pink stomach model). With a stretched out stomach it’s easier for you to eat more food than you need.”

“Let’s remember the 5 food groups that make up MyPlate: grain group, fruit group, vegetable group, dairy group and protein group. Think of your favorite food. Your favorite food may fit into more than one food group. A sandwich is a good example of a food that includes several MyPlate groups. Let’s build a sandwich and see how many food groups are in it.”

Place the plate on your lap and start with the sliced bread food models. Add meat, slice of cheese and lettuce.

“How many food groups does this sandwich have?”

Wait for responses.

(Four—Bread from the grain group, meat from the protein group, cheese from the dairy group and lettuce from the vegetable group)

“Only the fruit group is missing so I’m going to add a piece of fruit to eat for dessert.”

Place piece of fruit on the plate.

“When we EAT SMART, we eat foods from all of the different MyPlate groups in reasonable portions. Now everybody stand. We are going to wiggle and digest our way into the small intestine.”

Have all students stand and wiggle as they move to the next 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.
- Describe how villi help absorb nutrients from food.
- 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 Small Intestine Station from the stomach. This station is a long tunnel. The interior of bloodstream that represents the absorption of nutrients into the bloodstream.

Suggested Costume for Presenter
- Lightweight exercise clothing for active sports, bottle of water.
### Station 5: Small Intestine

**Graphics**

<table>
<thead>
<tr>
<th>Image Description</th>
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</thead>
<tbody>
<tr>
<td>The Small Intestine</td>
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</table>

**Script**

- "Welcome to the small intestine! Please sit down.”

- "You are here in the body.”

- "The small intestine squeezes food along like toothpaste is squeezed through a tube. Here in the small intestine the pieces of food that were 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. When the nutrients reach all the parts of the body, they have many different jobs. They help give us energy, help us grow and help us heal. When we EAT SMART, we get lots of different nutrients in our food.”

- "These are called villi (pronounced VILL-lee). 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.”

- "Do you know how long your small intestine is?”

- "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 a student to help you demonstrate how long your intestines are by taking the end of the rope and pulling slowly until all 20 feet of the rope are curved throughout the intestine station."
STATION 5: SMALL INTESTINE

Graphics

Script

“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 PLAY HARD.”

“Water also helps the nutrients move to all parts of your body. I’m going to set some glasses of pretend water here.”

Velcro 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.

“Every day kids need about 6-8 glasses of fluid. Drinking water is the best way to get the fluid you need. Give a ‘thumbs-up’ if you think you drink 6–8 glasses of fluid every day. Is it OK to drink soda pop instead of water?”

(No.)

“It’s OK to have low-fat or skim milk or 100% juice occasionally, instead of water, but we need to limit the amount of soda pop and other sugary drinks we drink.”

“For our small intestine to be healthy, we also need fiber in our diet. Fiber helps move waste from our body. We get fiber from eating lots of fruits, vegetables and whole grains. There’s much more fiber and other healthy nutrients in whole fruits than in fruit juice. Eating whole fruit is a better way to get our fruit servings than drinking juice. When we eat these foods, we EAT SMART.”

Ask students to stand.

“Walk slowly to the end of the small intestine. The villi will transport you into the bloodstream where you will eventually travel to the heart. As you pass through the villi, you will become a part of the bloodstream.”
Notes
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.
- Identify two things they can do to keep their heart healthy.

Station Description
Students will enter the enclosed heart station from the small intestine tunnel. Wall graphics show the various parts of the heart.

Suggested Costume for Presenter
- Colorful hearts on clothing or accessories
- Paper heart cutouts pinned on clothing or
- Pink or red clothing
STATION 6: HEART

Graphics

Script

Have students sit down.

“We’re going to talk about why you need to **EAT SMART** and **PLAY HARD** to make your heart healthy.”

“You have just entered the heart. You are here in the body.”

*Point to highlighted heart on flipbook.*

“We’re going to talk about why your heart needs to be healthy.”

*Show heart model. DO NOT PASS MODEL AROUND TO STUDENTS.*

“This model shows what the heart in your body looks like. Do you know how big your own heart is?”

*Wait for responses.*

“It is about the size of your fist.”

“Each time your heart beats the heart muscle squeezes making 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.”

“Your heart has 4 sections called chambers. Your blood moves through all of these chambers.”

*Point to graphic on the other side of the flipbook.*

“All of these fruits and vegetables are heart healthy foods. Eating heart healthy foods, in the right amounts, reduces the risk of heart disease and means you are **EATING SMART**. What are some other heart healthy foods?”

*Wait for responses.*

“Low fat dairy, Whole Grains and lean meats.”
## St A T I O N  6:  H E A R T

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Script</th>
</tr>
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<tbody>
<tr>
<td><img src="Image1.png" alt="Image" /></td>
<td>“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 hamburger and this is the amount of fat in a grilled chicken sandwich. This is how much fat is in one doughnut. Compare this to the fat in one pancake.”</td>
</tr>
<tr>
<td><img src="Image2.png" alt="Image" /></td>
<td>“When you feel your pulse, you are really feeling your heartbeat.” Ask students to put their fingertips gently on the left side of their neck, just below their ear and slightly under the jawbone, to find their pulse.</td>
</tr>
<tr>
<td><img src="Image3.png" alt="Image" /></td>
<td>“What happens to your heart when you <strong>PLAY HARD</strong>?” (Your heart beats faster. You can hear it or feel it in your pulse.) Select 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 quietly (no counting out loud) jump up &amp; down 10 times, then find their pulse again. Have the volunteer grip the pulse stick and look at the reading again. “What happened? Why?” (Your heart rate (pulse) increased to pump blood to your working muscles) “Is <strong>PLAYING HARD</strong> good for your heart?” Wait for responses. “Yes, when you <strong>PLAY HARD</strong>, you strengthen your heart muscle. When you exercise regularly, your heart stays healthy and strong. A strong heart muscle lets you <strong>PLAY HARD</strong>. Before you move to the lungs, let’s say Power Panther’s motto together: <strong>EAT SMART. PLAY HARD</strong>.” Remind children not to shout the motto.</td>
</tr>
</tbody>
</table>
Notes
**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.

**Key Concept:**
Power Panther says, **PLAY HARD**. Exercise keeps your lungs healthy.

**Station Description**
Students enter the enclosed Lungs Station from the Heart Station. Wall graphics show the various parts of the lungs.

**Suggested Costume for Presenter**
- Lightweight exercise clothing for active sports, bottle of water.
STATION 7: LUNGS

Graphics

Script

Have students sit down.

“You have just come from the heart and are now in the lungs.”

“You are here in the body.”

Point to highlighted lungs on flipbook.

“Your lungs are located in your 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 carbon dioxide each time we breathe OUT.”

“You just came from the heart where you learned that the heart beats faster when you PLAY HARD. 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 when you are playing.”

“Let’s see what a healthy lung should look like.”

Show healthy lung. DO NOT ALLOW STUDENTS TO HANDLE LUNGS CONTAINERS.

“What color are your lungs?”

(Pink—like tongue)

“When you smoke, your lungs turn dark gray from tars and nicotine in the smoke. Smoking increases the risk of lung disease.”

Show smoker’s lung to students.

“How can you keep your lungs from turning dark gray?”

(Don’t smoke!)
STATION 7: LUNGS

Graphics

Script

“Is it harmful to be around other people who are smoking?”

Wait for responses.

“Yes, smoke from someone else’s cigarette, cigar or pipe is called second-hand smoke. It can affect or hurt people who don’t smoke. Tobacco smoke contains hundreds of poisons that circulate in the air. These can be inhaled by anyone nearby.”

“Emphysema is a lung disease that is often caused by smoking. This disease causes the lungs to get stiff, which makes it difficult to breathe.”

Give each student a small straw. Instruct students to put the straws in their mouths, but not to chew on them. 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.”

“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 so you can PLAY HARD:

- Don’t smoke
- Ask others not to smoke around you
- Carpool to reduce air pollution
- Plant a tree to make more oxygen for us to breathe.

The next body part you’re going to visit is the bones.”
Notes
STATION 8: BONES

Key Concept:
Power Panther says, EAT SMART. Bones provide the framework for the body. Calcium in milk builds strong bones.

Key Outcomes:
Students will be able to:
- State a function of the bones.
- Name foods that will help build strong bones.
- Name a nutrient that is needed for strong bones.
- State how many servings from the dairy group are needed each day.

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

Key Outcomes:
Students will be able to:
- State that they need 1 hour of physical activity each day.
- State that exercise helps build strong bones.

Station Description
Students enter the enclosed Bones Station from the Lungs Station. Wall graphics provide the appearance of being inside a bone.

Suggested Costume for Presenter
- A hard hat and tool belt are provided.
- Other clothing might include carpenter overalls and/or tools.
STATION 8: BONES

Graphics

Script

Have students sit down. Volunteer presenter wears hard hat and tool belt that are provided.

“I am wearing a hard hat and a tool belt because I am building something. What do you think I am building?”

(Strong bones)

“You are here in the body.”

Point to highlighted bones on flipbook.

“Do I really build strong bones by wearing my hard hat?”

(No)

“We build strong bones by EATING SMART which means eating a variety of foods that are high in calcium. The dairy group supplies nutrients needed for strong bones.

In addition to calcium, vitamin D and protein are all important for maintaining strong bones. Skim milk or low-fat dairy products have all of the nutrients you need, but not the extra fat.”

“Some dark green vegetables like spinach and broccoli also supply nutrients for strong bones.”

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

Graphics

Script

Show milk bottle.

“How many servings of dairy products do you need every day?”

(3 servings)

“How many servings do you need every day?”

Wait for responses.

“No, it’s OK to have a carton of yogurt (show yogurt) or a piece of cheese (show cheese) instead of a glass of milk. But remember you need a total of 3 servings every day from the dairy group.”

“Our bones are covered with muscle, fat and skin. After we finish talking about the bones, you’re going on to the muscle and skin stations. I want each of you to feel your 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!”

Point to skeleton model.

“Our bodies have 206 bones. Our bones make up the framework 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 pig bone.

“This bone is from a wild pig. Your bones look like this, but they are smaller.”

“Kids your age need at least 1 HOUR of physical activity each 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.”

“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 SMART and PLAY HARD all our lives. If we don’t, bones can become brittle and break easily. It is extra important that we EAT SMART and PLAY HARD when we are children because bones grow more during childhood than they ever will again.

You are now ready to go to the muscles.”
CHAPTER 5 • INFORMATION FOR STATION PRESENTERS

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 Outcomes:
Students will be able to:

- Describe an activity that exercises muscles.

Station Description
Students enter the enclosed Muscles Station from the Bones Station. Wall graphics show the various parts of the muscles.

Suggested Costume for Presenter
- Padding in upper sleeve to make an exaggerated fake arm muscle
- Lightweight exercise clothing for active sports; bottle of water
CHAPTER 5 • INFORMATION FOR STATION PRESENTERS

STATION 9: MUSCLES

Graphics

Script

Turn to next page to begin presentation.

Have students sit down.

“You are now in the muscles. You are here in the body.”

Point to the highlighted muscles in the body on the flipbook.

“I’ll bet all of you have strong muscles. 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 SMART and PLAYING HARD)

“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 is that muscle called?”

(Heart)

“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. COLLECT ALL BEANBAGS BEFORE CONTINUING WITH SCRIPT.
**STATION 9: MUSCLES**

**Graphics**

**Script**

"Look at these healthy foods."

*Point to graphic on other side of the 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 (protein group) and cheese (dairy group))*

"We 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 **PLAYING HARD**."

"Carbohydrates come from breads, pastas, fruits and starchy vegetables like potatoes. Some of the foods that provide protein are meat, eggs, nuts and cheese."

"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!"

"**PLAYING HARD** 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. Stretching your muscles helps keep them flexible so you can bend and move easily. Stretching can also help to reduce the chance of getting hurt when you **PLAY HARD**."

*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. Lean to the left, then the right to stretch muscles. When finished, collect dynabands.*

"You have one more stop in the body—the skin. Before you leave for the skin, tell me Power Panther’s motto."

*Wait for responses. **REMEMBR STUDENTS NOT TO SHOUT THE MOTTO.***

"That’s correct! **EAT SMART. PLAY HARD.**"
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 Muscle Station. Wall graphics give the appearance of being inside the skin. 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 tropical shirt is provided.
- A large straw hat and sunglasses are provided.
STATION 10: SKIN

Graphics

Script

Have students sit down. Volunteer presenter wears straw hat (provided)

“You are now on the inside of the skin. We’re going to talk about how important it is to take good care of our skin on both the inside and the outside.”

“Skin is a protective covering for the body. It covers all of the other body parts you’ve visited today. It helps protect your muscles, your bones, your heart—all of your body parts.”

“You need to take good care of your skin. If you do injure your skin, it’s important to clean cuts and scrapes with soap and water and keep them covered.”

“We need to EAT SMART to keep our skin healthy. 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! Meat, eggs, nuts and cheese.”

Use food models and show foods that are good sources of vitamin C.

“Vitamin C comes from fruits like these food models. The body doesn’t store vitamin C so you need to eat foods with vitamin C every day.”

“It’s really important to have clean hands when 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.”

Select ONE volunteer to have “pretend germs” applied to his or her hand. Explain that it doesn’t hurt and they are not real germs. Ask this child to hold out his/her hand. Apply “germs” lightly to the palm of child’s hand.
STATION 10: SKIN

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 hand with pretend “germs” under the black light and ask children to look at the pretend “germs.” Now ask two different 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 three 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.

Point to graphic on other side of the flipbook.

“This girl is sunburned. Too much sun can hurt the skin.
Wearing sunscreen with an SPF of at least 30 helps protect the skin.
Raise your hand if you use sunscreen.”

Wait for a show of hands.

“It’s a good idea to wear sunscreen when you are outdoors. Don’t forget your face, neck and the tops of your ears! Use sunscreen often when you are swimming and again after you dry off. Wearing a big hat or long sleeves will also protect your skin from the sun.”

“There are other ways we can protect our skin. Look at Power Panther PLAYING HARD. Can anybody tell me how he is protecting his skin?”

Wait for responses.

“That’s right! We need to wear a helmet and knee and elbow pads anytime we are doing a sporting activity where we could fall.”

Point to cut in skin where students will exit this station.

“Now you’re almost ready to leave the body through that cut in the skin.
When you leave, be sure to turn around and look at the Band-Aid on the outside of the skin. Then you will travel along Power Panther’s Pathway to Life. What is Power Panther’s motto?”

(EAT SMART. PLAY HARD.) Remember, no shouting.
STATION 11: PATHWAY TO LIFE

Graphics

Script

“In the lunchroom you learned that it’s important to **EAT SMART** and choose a variety of foods from MyPlate.”

“Some of the things you learned in the brain were:

- Always wear a helmet when you **PLAY HARD**.
- Your brain is the boss of your body.
- When you super-size your meals you’re eating too much.”
**Graphics**

**Script**

“In the mouth you learned about the dairy group. Why do you need foods from the dairy group?”

(It gives you strong bones and teeth.)

“We get calcium from drinking milk and eating other dairy products. What else can you do to keep your mouth healthy?”

(brush and floss)

“While food is in the stomach, the digestion process breaks the food into smaller pieces. In the small intestine the nutrients are absorbed by the villi *(pronounced VILL-lie)* and then travel to the bloodstream. It is important to drink a lot of water to keep you healthy and help with absorb the nutrients. How many glasses of fluid should you drink each day?”

(6-8 glasses)
STATION 11: PATHWAY TO LIFE

<table>
<thead>
<tr>
<th>Graphics</th>
<th>Script</th>
</tr>
</thead>
</table>
| ![Graphics Image](image1) | “Power Panther is reminding you of some heart healthy foods. Can you name some heart-healthy foods?”
| ![Graphics Image](image2) | (Fruits, vegetables, whole grains and lean protein like chicken and fish.)
| ![Graphics Image](image3) | “In the lungs you learned that to have healthy, pink lungs, it’s important not to smoke.
What color will your lungs be if you smoke?”
| ![Graphics Image](image4) | (Black, grey or brown)
“In the bones station, we learned that calcium helps us build strong bones and teeth. **PLAYING HARD** also strengthens our bones. How much time do we need to spend each day **PLAYING HARD**?”

(1 hour)

“Power Panther is showing you his strong muscles. Which food groups help build strong muscles?”

(Protein and dairy groups.)
STATION 11: PATHWAY TO LIFE

Graphics

Script

“Power Panther is showing you his smooth, healthy skin. Why is it important to wash your hands?”

(To get rid of germs)

“The two most important times to wash your hands are before you eat and after you use the restroom.

Power Panther always uses sunscreen when he goes outdoors, you should too.”

“Power Panther has an important message for all of us. Can you tell me what it is?”

(EAT SMART. PLAY HARD.)

Remember, no shouting.
Notes
Script

Gather students around the survey boxes and give each student a playing card. Then say:

“Raise your hand if you forget to wear a helmet or if you don’t have a helmet to wear when you ride a bike, skateboard or roller blade.”

Students who raised their hands should place their cards in the box labeled DO NOT.

Each of the remaining students should place their cards in the box labeled DO.

When students have completed this procedure, ask them to return borrowed socks to the “Borrowed Sock Container” and escort them to the exit.