

## Manual

### An Exciting Educational Exhibit for K-5 Students



Food and Nutrition Service, USDA

#### Illinois Nutrition Education & Training (IL NET) Program (800) 466-7998

This *Body Walk* program has been adapted from: Nutrition Services Kansas State Department of Education

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### ---Introduction

#### Welcome to the Body Walk

The purpose of the *Body Walk* project is to engage teens in promoting lifetime healthy eating and physical activity to elementary-level students in their district and/or community. This teens-teaching-kids initiative involves students and educators working together to design and assemble a walk-through exhibit of the human body. Teens mentor elementary students who travel with them on the *Body Walk* tour, engaging them in educational activities at each station.

#### The Body Walk Experience



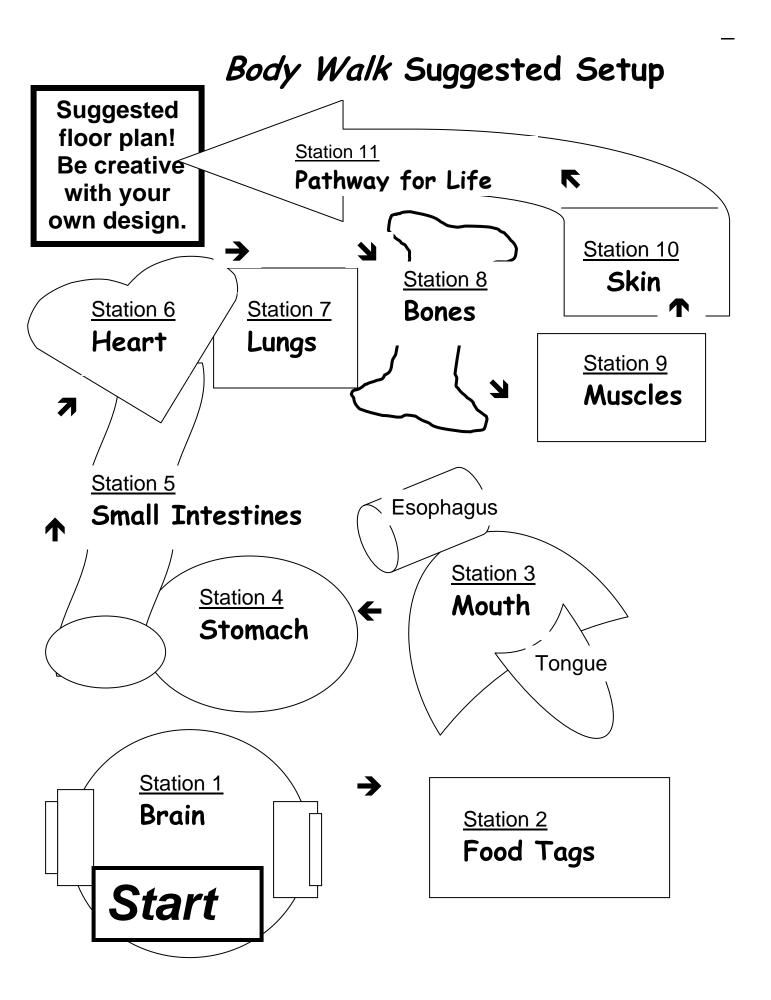
Students tour the human body exhibit with Power Panther<sup>TM</sup> graphics as their guide. Power Panther<sup>TM</sup> is the mascot of the USDA Food and Nutrition Service. Throughout the exhibit, students will learn how to apply the Power Panther<sup>TM</sup> slogan:

#### EAT SMART. PLAY HARD.<sup>™</sup>

At each of the *Body Walk's* eleven stations, a peer educator engages the students in a fiveminute activity focused on healthy choices. The tour begins when students, in groups of eight to ten, enter the brain station of the exhibit. At the brain station, students experience "brain waves" and learn about brain function. After they leave the brain, the students are each given a tag designating them as a food, such as a carrot, orange, or piece of cheese. The "foods" step into a larger-than-life mouth, are "swallowed" through the esophagus tunnel, and move into the stomach. From the stomach, the students travel through the small intestine where they are "absorbed" into the blood. Then they follow the path of the nutrients to the heart, lungs, bones, muscles, and skin stations. Students leave the body through a cut in the skin and proceed through Power Panther's<sup>™</sup> Pathway to Life. This final station recaps key health concepts from each of the ten previous stations. This exciting tour of the body provides children with a memorable way to build health behavior skills.

#### Body Walk Materials Include:

- 1. The *Body Walk* manual. This includes a timeline/checklist to prepare for the *Body Walk* event, station scripts, and suggestions for designing and constructing the exhibit.
- 2. "Traveling Trunks." These are *Body Walk* props and flipbooks (which include graphics and scripts) available for loan through the Illinois NET Loan Library.
- 3. CD-ROM. This provides student classroom activities, the *Body Walk* Manual and additional materials.



#### Why was the Body Walk Project Developed?

Because Our Children are Flunking Eating...

There is a critical need to address good nutrition and other healthy lifestyle choices. Among American kids:

- > Only 2% meet all recommendations of the Food Guide Pyramid.
- 16% do not meet ANY of the recommendations of the Food Guide Pyramid.
- > Less than 15% of school children eat the recommended servings of fruit.
- > Less than 20% eat the recommended servings of vegetables.
- About 25% eat the recommended servings of grains.
- > Only 30% consume the recommended milk group servings.
- > About two-thirds eat more fat than is recommended.

Lifestyle choices made at early ages have a direct impact on adult health. Students need to learn about healthy lifestyle choices and to avoid behaviors that have an adverse impact on adult health. Healthy eating and physical activity are important life skills that help children grow and prevent them from developing health problems, such as obesity, later in life. Obesity in youth often carries over into adulthood, contributing to the development of many chronic diseases, including heart disease and diabetes. Teachers need additional resources to increase nutrition knowledge and improve eating skills among elementary school students. The *Body Walk* can help meet these needs.

#### As a Result of the Body Walk...

- Schools will use the Body Walk project and its related materials to give children repeated opportunities to practice health behavior skills.
- > Children will learn about the digestive and other body systems.
- Children will remember the Body Walk because of the active learning involved.
- Nutrition, health and physical activity will be linked together to help reinforce positive health behaviors and raise the value children place on health.
- Children's eating and health behaviors will improve through learning the skills needed to practice lifelong healthy behaviors.
- There will be a greater awareness among parents, school personnel, and community members of the importance of teaching children to practice healthy behaviors.



# Timeline/Checklist

#### 6 Weeks or More before the *Body Walk* Event:

- □ Make scheduling arrangements with the *Body Walk* site (i.e., school), reserving a large enough space for your exhibit, such as a gymnasium, cafeteria, or hallway.
- □ Use a project approach to learning. Use cooperative learning techniques to brainstorm, design, and construct *Body Walk* exhibit components.
- □ Consult www.fns.usda.gov/eatsmartplayhard/zone/bio.html to begin the process of reserving Power Panther<sup>™</sup> costume from USDA, if desired.
- Consult www.fns.usda.gov/eatsmartplayhard/collection/collect\_kids.html to order free additional Power Panther<sup>™</sup> materials (i.e., tattoos, window clings), if desired.
- □ Solicit local grocery stores or food companies for donations of healthy snacks or water. Contact your school food service director to see if they are able to provide commodity foods for the day of the *Body Walk* event, if desired.
- □ Contact IL NET Loan Library at (800) 455-5843 or <u>net@roe21.k12.il.us</u> to reserve a *Body Walk* Traveling Trunk containing *Body Walk* materials.

#### 4 Weeks or More before the *Body Walk* Event:

Notify teachers of the upcoming *Body Walk* exhibit using Teacher Memo 1 (available on *Body Walk* CD-ROM)

#### 3 Weeks before the Body Walk Event:

- □ Recruit or assign 15 people to be station presenters (Volunteer Recruitment letter, and Station Presenter Sign-Up sheet available on *Body Walk* CD-ROM).
- □ Recruit volunteers to assist on the day of the event—i.e., for set-up and takedown, managing flow of students, manning snack table, wearing Power Panther™ costume, if using (Volunteer Recruitment letter, Station Presenter Sign-Up sheet and Set-Up and Take-Down Crew Sign-Up sheets available on *Body Walk* CD-ROM).
- □ Recruit volunteers or teachers to help assemble "goody bags" for each student (i.e., containing *Body Walk* student activity book as well as extra items, such as Power Panther<sup>™</sup> tattoos, stickers, or items that encourage physical activity and good eating), if desired.
- □ Copy Classroom Activities and Teacher Resources (available on *Body Walk* CD-ROM), and distribute to teachers, encouraging them to use these materials.
- □ Confirm that reserved space at the school will be available and set up as desired for the *Body Walk* event.
- □ Request that a school administrator sign the *Body Walk* Proclamation (available on *Body Walk* CD-ROM), if desired, and obtain permission to post in the school.

#### 1 Week before the Body Walk Event:

- □ Review with station presenters Station Scripts and Design Ideas (available in Manual) and flipbooks (available on *Body Walk* CD-ROM).
- □ Arrange for someone who is familiar with the students, teachers, and physical layout of the building to escort children to and from the exhibit.
- Complete Classroom Schedule and send to teachers (available on *Body Walk* CD-ROM).
- □ Contact news media and send Pre-*Body Walk* News Release (available on *Body Walk* CD-ROM).
- Dest the *Body Walk* proclamation in the school, if using.
- □ Make copies of student activity book, one for each student.
- □ Assemble "goody bags" for students, if desired.
- □ Print Food Tags (available on *Body Walk* CD-ROM).

#### The Day before the Body Walk Event:

- □ Remind teachers with Teacher Memo 2 that tomorrow is *Body Walk* day (memo available on *Body Walk* CD-ROM).
- □ Contact news media to verify an on-site visit.
- Purchase any healthy food items for snacks or refreshments for volunteers (Hint Bottled water is refreshing for station presenters).
- Set up *Body Walk* exhibit.



#### Body Walk Event Day:

- □ Bring all necessary materials. Smile and enjoy the day!
- □ Implement *Body Walk* schedules for students and for volunteer breaks see page 8 in Manual & Classroom Schedules (available on *Body Walk* CD-ROM).
- □ Remind teachers that they have more classroom activities to implement—one for each of the *Body Walk* stations.
- □ Send Post-*Body Walk* News Release, if news media did not attend (available on *Body Walk* CD-ROM).

#### Within One Week Following the Body Walk Event:

□ Thank volunteers, teachers, and others who helped make the day a success (letters and Teacher Memo 3 available on *Body Walk* CD-ROM).

## Ways to Maximize the *Body Walk* Experience

### 1. Encourage teachers to discuss the *Body Walk* exhibit in the classroom

- Have students contribute to a *Body Walk* newsletter to take home.
- On the back of the newsletter, ask students to write down something they like about Power Panther<sup>™</sup> and his message (sample available on *Body Walk* CD-ROM).

#### 2. Provide healthy snacks for students and volunteers

- Please be sure snacks served to students and volunteers on the day of the *Body Walk* event are healthy (i.e., fruit, dried fruit, 100% juice, trail mix, low-fat popcorn, crackers, bottled water).
- It sends a confusing message to students when the *Body Walk* project emphasizes the "EAT SMART" message but students observe volunteers consuming chips, pop, doughnuts, candy, and cookies.
- Please DO NOT serve unhealthy items to students after the *Body Walk* tour. Help convey the "EAT SMART" message by having only healthy snacks and beverages available.

#### 3. Use these tips when working with the media:

- Coordinate media coverage with the district's public relations staff as much as possible. They already may have relationships with reporters and can help get the story covered.
- Concentrate on local media (i.e., town newspaper, local cable channel, local radio station), since these tend to focus on local human interest stories.
- Contact reporters at least a week in advance of the event, asking if they would like more information.
- Send a news release (samples available on *Body Walk* CD-ROM) to the writer of a particular newspaper column or to the producer of a local radio or television program. Send the release with a short and simple note, expressing hope that this story will be useful. Follow-up with a phone call a few days later.
- Suggest that both a reporter and a photographer come to experience the *Body Walk*.

#### 4. Borrow the Power Panther<sup>™</sup> costume

• See

www.fns.usda.gov/eatsmartplayhard/zone/bio.html for details.



## 5. Provide other fun Power Panther<sup>™</sup> items to students (i.e., tattoos, window clings, stickers)

• See www.fns.usda.gov/eatsmartplayhard/collection/collect\_kids.html for details.

#### 6. Have a Power Panther<sup>™</sup> school lunch

 Work with school food service personnel and students to coordinate the menu, emphasizing whole grains, fruits, and vegetables. Decorate with Power Panther<sup>™</sup> posters or have students draw Power Panther<sup>™</sup> and post their artwork. Examples:



Panther's Turkey Sandwich with Lettuce and Tomato EAT SMART Fresh Veggies and Dip Yummy Fresh Fruit Power-Up Milk OR Panther's Low-Fat Chicken Fajita Spanish Rice EAT SMART Fresh Tossed Salad/Low-Fat Dressing Mixed Fresh Fruit Salad Power-Up Milk

• Have each class conclude the meal with some PLAY HARD physical activity—i.e., walk around the block, play a game outdoors, or participate in an active classroom activity.

#### 7. Have a contest to give away a free bicycle helmet

- Contact a local retailer to donate a bicycle helmet.
- Sponsor a bike safety poster contest and use the helmet as a prize. Recruit *Body Walk* volunteers to judge the posters.
- OR have each student draw a picture or write a paragraph about something they learned about physical activity during their *Body Walk* tour. Select the best from each classroom, and then draw a name for the prize.
- OR have children donate pennies for a worthy charity. The helmet winner will be drawn from the names of the class that collects the most money.

#### For more information on Bike Safety, contact:

Safe Kids Illinois State Illinois Dept of Public Health 500 East Monroe Street Springfield, IL 62701 217-524-2446 www.safekids.org

League of Illinois Bicyclists 2550 Cheshire Drive Aurora, IL 60504 630-978-0583 www.bikelib.org

Kids on Bikes in Illinois www.state.il.us/kids/isp/bikes/

### The Schedule for Body Walk Day

Students spend an estimated 5 minutes at each of the Body Walk stations.

A 5-minute break for station presenters may be scheduled every 60 - 90 minutes. More frequent breaks tend to be disruptive to the flow of the *Body Walk*. Breaks are easily scheduled by simply delaying the start of a group of students for 5 minutes. Refer to the sample schedules on the following pages.

The *Body Walk* schedule also works best if the entire group of station presenters does not break for lunch at the same time. Each station presenter may begin lunch after the last students in a group exit his/her station. To make the best use of time, keep volunteer lunch breaks to no more than 30 minutes. This ensures that the amount of time between the start of the last group of morning students and the beginning of the first group of afternoon students is no more than 30 minutes. See the sample schedules on the following pages for details.

#### Sample Body Walk Schedules

Schools with 200 or fewer students will finish the Body Walk before lunch.

<b>100 Students</b> 8-10 students per group, 10-13 groups	
Start at:	End at:
8:30	9:25
8:35	9:30
8:40	9:35
8:45	9:40
8:50	9:45
8:55	9:50
9:00	9:55
9:05	10:00
9:10	10:05
9:15	10:10
9:20	10:15
9:25	10:20
9:30	10:25

150 Students	
8-10 students per group, 15-19 groups	
8-10 students per group, 1	5-19 groups
<u>Start at:</u>	<u>End at:</u>
8:30	9:25
8:35	9:30
8:40	9:35
8:45	9:40
8:50	9:45
8:55	9:50
9:00	9:55
9:05	10:00
9:10	10:05
9:15	10:10
9:20	10:15
9:25	10:20
9:30	10:25
9:35	10:30
9:40	10:35
9:45	10:40
9:50	10:45
9:55	10:50

Schools with 200 or fewer students will finish the *Body Walk* before lunch.

200 Students 8-10 students per group	o, 25 groups
Start at:	End at:
8:30	9:25
8:35	9:30
8:40	9:35
8:45	9:40
8:50	9:45
8:55	9:50
9:00	9:55
9:05	10:00
9:10	10:05
9:15	10:10
9:20	10:15
9:25	10:20
9:30	10:25
9:35	10:30
9:40	10:35
9:45	10:40
9:50	10:45
9:55	10:50
10:00	10:55
10:05	11:00
10:10	11:05
10:15	11:10
10:20	11:15
10:25	11:20
10:30	11:25
10:35	11:30
10:40	11:35
10:45	11:40

250 Studer	nts	300 Students	
8-10 students per group	, 25-31 groups	8-10 students per g	roup, 30-38
		groups	-
Start at:	End at:	<u>Start at:</u>	End at:
8:30	9:25	8:30	9:25
8:35	9:30	8:35	9:30
8:40	9:35	8:40	9:35
8:45	9:40	8:45	9:40
8:50	9:45	8:50	9:45
8:55	9:50	8:55	9:50
9:00	9:55	9:00	9:55
9:05	10:00	9:05	10:00
9:10	10:05	9:10	10:05
9:15	10:10	9:15	10:10
9:20	10:15	9:20	10:15
9:25	10:20	9:25	10:20
5 minute break		9:30	10:25
9:35	10:30	9:35	10:30
9:40	10:35	9:40	10:35
9:45	10:40	5 minute break	
9:50	10:45	9:50	10:45
9:55	10:50	9:55	10:50
10:00	10:55	10:00	10:55
10:05	11:00	10:05	11:00
10:10	11:05	10:10	11:05
10:15	11:10	10:15	11:10
10:20	11:15	10:20	11:15
10:25	11:20	10:25	11:20
10:20	11:25	10:20	11:25
5 minute break	11.20	5 minute break	11.20
10:40	11:35	10:40	11:35
10:45	11:40	10:45	11:40
10:40	11:45	10:50	11:45
10:55	11:50	10:55	11:50
11:00	11:55	11:00	11:55
11.00	11.00	30 minute lunch	11.00
		11:35	12:30
		11:40	12:35
		11:40	12:33
		11:50	12:40
		11:55	12:45
		12:00	12:55
		12:00	12.55
		12:10	1:05

	350 Stu	dents	
8-10	0 students per gr	oup, 35-48 groups	
Start at:	End at:	(Cont.) <u>Start at:</u>	End at:
8:30	9:25	(Cont.) <u>Start at.</u> 12:00	12:55
8:35	9:30	12:00	1:00
8:40	9:35	12:00	1:05
8:45	9:40	12:10	1:10
8:50	9:45	12:13	1:15
8:55	9:50	12:20	1:20
9:00	9:55	12:23	1:25
9:05	10:00	12:35	1:30
9:10	10:05	12:33	1:35
9:15	10:00	12:40	1:40
9:20	10:15	12:43	1:40
9:25	10:20	12:55	1:50
5 minute break	10.20	1:00	1:55
9:35	10:30	1:05	2:00
9:40	10:35	1:10	2:05
9:45	10:33	1.10	2.05
9:50	10:45		
9:55	10:50		
10:00	10:55		
10:05	11:00		
10:00	11:05		
10:10	11:10		
10:13	11:15		
10:20	11:20		
10:23	11:25		
5 minute break	11.25		
10:40	11:35		
10:45	11:40		
10:43	11:45		
10:55	11:50		
11:00	11:55		
11:05	12:00		
11:10	12:05		
11:15	12:10		
11:20	12:15		
11:25	12:20		
30 minute lunch	12.20		

400 Students			
8-10	) students per gr	oup, 40-50 groups	
Start at:	End at:	(Cont.) Start at:	End at:
8:30	9:25	12:00	12:55
8:35	9:30	12:05	1:00
8:40	9:35	12:10	1:05
8:45	9:40	12:15	1:10
8:50	9:45	12:20	1:15
8:55	9:50	12:25	1:20
9:00	9:55	12:30	1:25
9:05	10:00	12:35	1:30
9:10	10:05	12:40	1:35
9:15	10:10	12:45	1:40
9:20	10:15	12:50	1:45
9:25	10:20	12:55	1:50
5 minute break		1:00	1:55
9:35	10:30	1:05	2:00
9:40	10:35	1:10	2:05
9:45	10:40	1:15	2:10
9:50	10:45	1:20	2:15
9:55	10:50	1:25	2:20
10:00	10:55	1:30	2:25
10:05	11:00	1:35	2:30
10:10	11:05	1:40	2:35
10:15	11:10	1:45	2:40
10:20	11:15	1:50	2:45
10:25	11:20	1:55	2:50
10:30	11:25	2:00	2:55
5 minute break			
10:40	11:35		
10:45	11:40		
10:50	11:45		
10:55	11:50		
11:00	11:55		
11:05	12:00		
11:10	12:05		
11:15	12:10		
11:20	12:15		
11:25	12:20		
30 minute lunch			

8-1	500 Stu 0 students per gro	dents oup, 50-65 groups	
Start at:	End at:	(Cont.) Start at:	End at:
8:30	9:25	12:20	1:15
8:35	9:30	12:25	1:20
8:40	9:35	12:30	1:25
8:45	9:40	12:35	1:30
8:50	9:45	12:40	1:35
8:55	9:50	12:45	1:40
9:00	9:55	12:50	1:45
9:05	10:00	12:55	1:50
9:10	10:05	1:00	1:55
9:15	10:10	1:05	2:00
9:20	10:15	1:10	2:05
9:25	10:20	1:15	2:10
9:30	10:25	1:20	2:15
5 minute break		1:25	2:20
9:40	10:35	1:30	2:25
9:45	10:40	1:35	2:30
9:50	10:45	1:40	2:35
9:55	10:50	1:45	2:40
10:00	10:55	1:50	2:45
10:05	11:00	1:55	2:50
10:10	11:05	2:00	2:55
10:15	11:10	2:05	3:00
10:20	11:15	2:10	3:05
10:25	11:20	2:15	3:10
10:30	11:25	2:20	3:15
10:35	11:30	2:25	3:20
5 minute break		2:30	3:25
10:45	11:40		
10:50	11:45		
10:55	11:50		
11:00	11:55		
11:05	12:00		
11:10	12:05		
11:15	12:10		
11:20	12:15		
11:25	12:20		
11:30	12:25		
11:35	12:30		
11:40	12:35		
11:45	12:40		
30 minute lunch			



### Station Scripts and Design Ideas Tips 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 <u>not</u> be used on the day of the *Body Walk*. You will use a 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<sup>™</sup> graphics as a guide. Power Panther<sup>™</sup> is the USDA Food and Nutrition Service mascot. Throughout the exhibit, students will learn how to apply the Power Panther<sup>™</sup> slogan, **EAT SMART. PLAY HARD.<sup>™</sup>** 

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

- Familiarize yourself with the script prior to the *Body Walk*. This will ensure you are more relaxed and confident with the information you are presenting.
- All graphics referred to in each station section are provided in the form of a flipbook that is available on *Body Walk* CD-ROM.
- 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.
- Ask students to sit down when they first enter the station.
- Ask students to WALK to the next station.
- Please ensure students handle the exhibit props carefully. No kicking, hitting or punching of exhibit components.
- All presenters will be responsible for maintaining an atmosphere of learning rather than running or playing.
- 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!
- Presenters will spend about 5 minutes talking at each station. They should keep to this time schedule as close as possible.

### Station 1 – Brain

#### **Key Concept**

Power Panther<sup>™</sup> says, EAT SMART. PLAY HARD.<sup>™</sup> Healthy food choices from the Food Guide Pyramid and vigorous exercise help jump-start your brain!

#### **Key Outcomes**

Students will be able to:

- Identify the five major food groups from the Food Guide Pyramid.
- Tell the number of servings needed for good health from each Food Pyramid 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 Design Ideas**



Have the students enter the brain (i.e., through an ear). Consider covering the floor with soft or gray material, similar to the brain. There should be a firm path from ear to ear inside the brain to ensure that it is handicap accessible. Strobe or traveling Christmas tree lights can simulate brain impulses.

Perhaps add eyes and ears to a camping tent.

Create your own brain station by building a frame and covering it.



#### Write in Your Own Design Ideas:

#### **Teaching Aids You Will Need to Provide:**

• Bicycle helmet

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

- "Super-brain" 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 – In Traveling Trunk on flipbook	Script	
Life-size stand-up graphic of Power Panther™.™ Available in traveling trunk from Loan Library.	Brain station presenter will greet students outside of the Brain area Power Panther <sup>™</sup> welcomes you to the Body Walk!!! Power Panther <sup>™</sup> has a special message for each of you – EAT SMART. PLAY HARD. <sup>™</sup> Point to the life size cutout of Power Panther <sup>™</sup> . We are ready to start on an adventure through the body.	
Child thinking of foods and physical activity	You use your brain everyday to make important choices in your life. You choose the foods you eat. You choose how much physical activity you have each day. Your parents may make these choices now, but as you get older, You will make these important choices everyday. You make these choices by using your brain. Your brain sends messages to all parts of your body and controls everything your body does. <i>Point to lights, if using</i> . Your brain can send messages to parts of your body as quickly as a flash of light.	
Brain showing lobes	Your brain is soft and squishy, so it's good that your skull helps protect your brain. <i>Show brain model</i> .	
Food Guide Pyramid	<ul> <li>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.</li> <li>Show Food Guide Pyramid on flipbook and tell the five main Pyramid groups along with the recommended servings. Point out that the tip of the Pyramid is fats and sweets.</li> <li>Is it OK to have foods from the tip? (Yes, but they should be limited.)</li> <li>Look at these foods.</li> <li>Hold up plastic food models. If time allows, kids may touch food models.</li> </ul>	

Station 1 – Brain Flipbook	
Graphics – In Traveling Script Trunk on flipbook	
	Do you eat about this much? Each of these (except double scoop of ice cream) = 1 serving from the Pyramid. (Emphasize importance of eating at least 1 whole serving of fruits, vegetables and milk at meals) (Probably the portion sizes they eat of some foods are larger – like many restaurants super-size pasta, ice cream, etc.) When you super-size your meal, you're eating too much. Ask students to return plastic food models to plastic bin.
Cereal, fruit, yogurt, milk	How many of you eat breakfast? <i>Wait for responses.—</i> Breakfast is important because it gives your brain energy to "jump start" your day. By breakfast time, it's already been about 12 hours since you last ate. 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 <sup>™</sup> tells us to <u>Play Hard</u> . Kids your age need at least 1 <u>hour</u> of physical activity every day. Power Panther <sup>™</sup> is checking his watch to be sure he's getting an hour of physical activity. Being physically fit and physically 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 <sup>™</sup> engaged in various activities and wearing the appropriate protective gear while riding a bike, skating, etc.	<ul> <li>We've talked about Eating Smart and Playing Hard to help our brain. What else can we do to protect our brain? <i>Wait for answers.</i></li> <li><i>Show bicycle helmet.</i></li> <li>Always wear a helmet when you play hard. A helmet protects your brain from injury.</li> <li>We're ready to leave the brain. At the next station you'll get a food tag.</li> </ul>

### Station 2 - Food Tags

#### **Station Description**

Students will receive their food tag after they exit the Brain Station. At the Food Tag Station, 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.

#### Suggestion

Hole punch Food Tag and use string or yarn to attach to tag for hanging around the neck.



Give each student a food tag. Food Tags are available on CD-ROM. There are 5 different colors of food tags. Be sure that within the group all 5 colors are given to students.

I'm giving each of you a food tag. Please keep it with you throughout the *Body Walk*. The food tag will tell what food you are as you are traveling through the digestive system. Today we're going to see what happens to the foods you eat. Each of you will be a food from one of the five Pyramid groups. What are those Pyramid groups? *Wait for responses*.

- Grain group (bread, cereal, rice, pasta)
- Vegetable group
- Fruit group
- Milk, yogurt and cheese group
- Meat, poultry and fish group

Fats, oils and sweets are at the tip of the Pyramid. Foods from this group should only be eaten once in a while.

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 **tan** tag, you are a grain.
- Tags that are tan have a "B" on them for vitamin B. Vitamin B helps unlock the energy in your other foods.
- If you have a green tag, you are a vegetable.

- Tags that are green have an "A" on them for vitamin A. Vitamin A helps us see well.
- If you have an **orange** tag, you are a fruit.
- Tags that are orange have a "C" on them for vitamin C. Vitamin C helps heal cuts.
- If you have a **white** tag, you are a dairy product.
- Tags that are white have a "CA" for calcium. Calcium helps us build strong bones and teeth.
- If you have a **red** tag, you are from the meat group.
- Tags that are red have a "P" on them for protein. Protein helps us build strong muscles.

Now that you have your food tag, 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 bloodstream. After you're in the bloodstream, you'll be able to visit the heart, lungs, bones, muscles and skin.

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

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 taste. 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 the *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<sup>™</sup> 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 Design Ideas**



Students might enter the Mouth Station by walking across a large tongue. Create a mouth using paint / markers on paper or a sheet of plastic shower curtain. Also consider a 4 ft x 5 ft banner made at a print shop with an opening for children to walk through. Hang banner in the corner of the gym, on Volleyball poles or have volunteers hold banner. When inside the mouth use white buckets to represent the teeth and use red poster board to represent the tongue.

#### Write in Your Own Design Ideas:

#### **Teaching Aids You Will Need to Provide:**

- White buckets, boxes, or mats to serve as "teeth"
- A large "toothbrush" to brush large "teeth"

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

White lab coat to represent a dentist

Station 3 - Mouth Flipbook		
Graphics – In Traveling Trunk on flipbook	Script	
	Welcome to the mouth! Please sit down on one of the teeth.	
Body with mouth highlighted	You are here in the body. <i>Point to the highlighted mouth.</i>	
Power Panther™ brushing and flossing	<ul> <li>You need healthy teeth to: <ul> <li>eat chewy or crunchy foods, and</li> <li>cut up food to be digested.</li> </ul> </li> <li>You need healthy gums to hold your teeth in.</li> <li>You need a healthy tongue to enjoy the taste of your food.</li> <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.</li> </ul> Tell students to look at the drawing of Power Panther™ brushing and flossing.	
A smile	<ul> <li>The American Dental Association recommends – Angle your toothbrush against your teeth and move the brush gently back and forth. Move the brush gently up and down for inside teeth.</li> <li>Demonstrate brushing teeth (stools) or ask a student to demonstrate. Remember to brush your tongue too!</li> <li>A toothbrush, 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.</li> <li>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.</li> </ul>	
Popular foods with a high sugar content "X" across foods	Sticky sugary foods (like candy); sweet drinks (like pop and lemonade) 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.	

Station 3 – Mouth Flipbook	
Graphics – In Traveling Trunk on flipbook	Script
Power Panther™ surrounded by low-fat dairy foods such as low-fat milk, yogurt, low-fat cheese	<ul> <li>Do you know what foods help build strong teeth? (<i>dairy foods</i>)</li> <li>Look at your food tag and raise your hand if you are a dairy food. (<i>cheese, milk</i>)</li> <li>There are other foods that also help build strong teeth. Some of these include broccoli and canned fish, like salmon.</li> </ul>
	What nutrient is in these good foods that helps build strong teeth? <i>(calcium)</i>
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 mouths looking nice and healthy!
A healthy mouth and sparkling smile	You are now ready for your trip through the esophagus into the stomach.

### Station 4 - Stomach

#### **Key Concept**

Power Panther<sup>™</sup> 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 Food Guide Pyramid groups.
- Describe how food moves through the digestive tract.
- Describe the digestive action that takes place in the stomach.

#### **Station Design Ideas**

Students enter the Stomach Station by passing through the esophagus from the mouth. The stomach features a large Food Guide Pyramid illustration.

#### **Esophagus**

To represent the esophagus, check to see if local toy store or Toys-R-Us online, has a "Neon See - Me Connecting Tunnel" to lead to the stomach or be creative with other materials. (Boxes, plastic tubes etc.)



#### Stomach Station & Large Food Pyramid

The stomach can be outlined on the floor with red dyed rope. Create a very large food pyramid and attach to the floor so children can sit on it.



#### **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 – In Traveling Trunk on flipbook	Script
	Welcome to the stomach! Look at your food tag and sit near your Food Pyramid 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	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 Pyramid food groups. Raise your hand when your favorite food fits into the group I name.
Power Panther™ face saying, "Yum"	Name Pyramid food groups: Grain group, fruit group, vegetable group, dairy group, meat group, fats, oils & sweets group.
Drawing of five nutrient symbols	Foods from each Pyramid group give us different building blocks our bodies need. These building blocks are 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.
	<ul> <li>Hold up the protein (P) symbol. This is a symbol for protein. What food groups give us protein?</li> <li>(meat, dairy)</li> <li>Hand the protein (P) symbol to a student and ask him/her to put the symbol on the meat group.</li> <li>Hold up the calcium (CA) symbol. What food group gives us calcium? (dairy)</li> </ul>

Station 4 - Stomach Flipbook	
Graphics – In Traveling Trunk on flipbook	Script
	<ul> <li>Hand the calcium (CA) symbol to a student and ask him/her to put the symbol on the dairy group.</li> <li>Hold up the vitamin B (B) symbol.</li> <li>What food group gives us vitamin B? (bread)</li> <li>Hand the vitamin B (B) symbol to a student and ask him/her to put the symbol on the bread group.</li> <li>Hold up the vitamin C (C) and vitamin A (A) symbols.</li> <li>What food pyramid groups give us vitamin A and vitamin</li> <li>C? (fruits and vegetables)</li> <li>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.</li> </ul>
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 on their food tag stand up. Point out that the protein rich foods are in the meat and dairy groups at the top of the Food Pyramid. Have the proteins begin the digestion process. Continue adding other nutrient groups (vitamin B, calcium, vitamin C, vitamin A) until all foods in the stomach have been broken down. Ask students to sit down.
Drawing of Power Panther™ with his stomach saying, "Garr…"	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.

### Station 5 - Small Intestine

#### **Key Concept**

Power Panther<sup>™</sup> 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. Power Panther<sup>™</sup> 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**

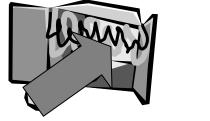
Students will be able to:

- State 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.
- 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 Design Ideas**

This station is a long tunnel. The interior of the small intestine has "villi" that can hang from the boxes. You might put several large boxes together, adding pink yarn or crepe paper at the top to represent the villi in the intestines.

Students may want to use  $\frac{1}{2}$  of the "Neon See – Me Connecting Tunnel" and attach "villi" to the top to represent the small intestines.





#### Write in Your Own Design Ideas:

#### **Teaching Aids You Will Need to Provide:**

• "Villi", container for rope, 8 – 8oz cups or glasses

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

Station 5 - Small Intestine Flipbook	
Graphics – In Traveling Trunk on flipbook	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.
Body 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 ( <i>point to sides of exhibit</i> ) 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 hanging strips (villi) These are called villi (vil- $l\bar{i}$ ). 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? <i>Wait for responses.</i> 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.

Station 5 - Small Intestine Flipbook	
Graphics – In Traveling Trunk on flipbook	Script
	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.
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 with holding up one glass. 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	Everyday you need at least 8 glasses of water. Raise your hand if you think you drink 8 glasses of water (only water!) everyday. Is it OK to drink soda pop instead of water?
	(No. Juice, pop and other drinks are not substitutes for water)
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. 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.

### Station 6 - Heart

#### **Key Concept**

Power Panther<sup>™</sup> says, EAT SMART. Low-fat foods are good for your heart. Power Panther says, PLAY HARD. Exercise keeps your heart healthy.

#### **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 food.
- State what happens to blood vessels if a 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 Design Ideas He

#### Heart Station

You might attach red balloons or paper hearts to the floor in the outline of a heart. Add to the area by making a large heart poster showing the different chambers of the heart.

#### Write Your Own Design Ideas:

#### **Teaching Aids You Will Need to Provide:**

Heart poster

#### **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 – In Traveling Trunk on flipbook	Script
	You have just entered the heart. You are here in the body. <i>Point to heart poster</i> . We're going to talk about why your heart needs to be healthy.
	Where is your heart? <i>Wait for responses.</i> 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? <i>(About the size of a fist.)</i>
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. <i>Point to poster or flip book.</i> Your blood moves through all of these chambers.
Power Panther™ with heart-healthy foods	Look at your food tag. All of these foods are heart- healthy. 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
	If you eat too much fat, arteries may become clogged with fat and your heart doesn't work properly.
Power Panther™ checking his	When you feel your pulse, you are really feeling your

Station 6 - Heart Flipbook	
Graphics – In Traveling Trunk on flipbook	Script
pulse	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, and 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? <i>Wait for responses.</i> 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.

### Station 7 - Lungs

#### **Key Concept**

Power Panther<sup>™</sup> 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 may be harmful.
- Name factors that are important in keeping lungs healthy.

#### **Station Design Ideas**

Attach pink balloons on the floor to outline the lung station or construct lungs using plastic or cardboard tubes connected to two large sacks. Materials to consider using include wrapping paper tubes, PVC tubes, sheets, bean bag chairs, etc. Add to the area by making a large lung poster.





#### Write in Your Own Design Ideas:

#### **Teaching Aids You Will Need to Provide:**

- Poster of lungs
- Wastebasket and straws

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

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

Station 7 – Lungs Flipbook	
Graphics – In Traveling Trunk on flipbook	Script
	You are now in the lungs. You are here in the body. <i>Point to lungs poster or flipbook.</i>
Power Panther™ showing location of lungs	<ul> <li>Where are your lungs located in your body? (Upper chest)</li> <li>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.</li> <li>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</li> </ul>
Power Panther™ comparing his pink tongue to his pink lungs	lungs help you breathe faster and better. Let's see what a healthy lung should look like. Show healthy lung.
	What color are your lungs? ( <i>pink- like tongue</i> ) How can you keep your lungs pink?
A smoker's lung	(Don't smoke!) What happens to your lungs when you smoke? Lungs turn dark gray from tars and nicotine in the smoke. Smoking can cause 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 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 – In Traveling Trunk on flipbook	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? ( <i>No</i> )
	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.
	<ul> <li>Here are some things you can do to keep your lungs healthy.</li> <li>Don't smoke</li> <li>Ask others not to smoke around you</li> <li>Carpool (explain)</li> <li>Stay away from air pollution</li> </ul>
	The next body part you're going to visit is the bones.

## **Key Concept**

Power Panther<sup>™</sup> says, EAT SMART. Bones provide the framework for the body and calcium in milk builds strong bones. Power Panther<sup>™</sup> says, PLAY HARD. Exercise helps build 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 of dairy products are needed daily.
- Students will be able to describe how exercise builds strong bones.

## **Station Design Ideas**

You could build a bone wall of milk containers with the word "Calcium" written on them to designate the bone station. Milk containers can be attached with strong tape onto a cardboard stand. You might construct a large carton of milk using a refrigerator box. Add to the area by making a bone poster.

# Write in Your Own Design Ideas:

# **Teaching Aids You Will Need to Provide:**

• Construction worker, building tools or clothing

# **Suggested Costume for Presenter**

A hard hat, carpenter overalls and/or tools

Station 8 – Bones Flipbook	
Graphics – In Traveling Trunk on flipbook	Script
	You are here in the body. Point to highlighted bones in flip book.
	I am wearing things a construction worker or builder would wear because I am building something. What do you think I am building? ( <i>strong bones</i> )
Power Panther™ building strong bones	Do I really build strong bones by wearing these things? (No)
	We build strong bones by eating a variety of foods that are high in calcium. The dairy 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 dairy group that are good sources of calcium? (milk, yogurt and cheese)
	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 – In Traveling Trunk on flipbook	Script
Power Panther™ with a sign	Display food models of milk, yogurt & cheese. 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 skeletal system	Our bones are covered with muscle, fat and skin. <i>Instruct students to feel their ear lobe.</i> What does it feel like? <i>(soft)</i> 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. <i>Show bone model.</i> Your bones look like this, but they are smaller.
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.

## **Key Concept**

Power Panther<sup>™</sup> says, EAT SMART. Foods with carbohydrates provide fuel for exercising muscles, and protein helps build muscle tissue. Power Panther<sup>™</sup> says, PLAY HARD. Exercise increases muscle strength and lets you play longer.

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

# **Station Design Ideas**



For the floor, create a body outline of muscles made out of laminated paper to designate muscle station or cordon off the area with stretchy rope, cords or elastic, representing the muscles' ability to expand and contract. Add to the area by making a muscle poster.

# Write in Your Own Design Ideas:

# **Suggested Costume for Presenter**

Padding in upper sleeve to make exaggerated bicep muscles. Exercise clothing (such as sweat pants) for active sports; bottle of water.

Station 9 - Muscles Flipbook	
Graphics – In Traveling Trunk on flipbook	Script
	You are now in the muscles. You are here in the body ( <i>point</i> to flipbook).
	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? <i>(Eating healthy foods and exercising)</i>
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? ( <i>heart</i> )
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.
	<i>Show muscle replica.</i> 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)
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? <i>(pork chop (meat group) and cheese (dairy group).</i>
	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 – In Traveling Trunk on flipbook	Script
	Ask students to identify which Food Guide Pyramid group the foods on the flipbook fit into (pork chop in meat, cheese in dairy, muffin in grains, green beans in vegetable and banana in fruit.)
Power Panther™ holding the Food Guide Pyramid on a platter	Carbohydrates come from breads, pastas and fruits. 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 and dairy groups.
Power Panther™ giving clues	<ul><li>There's something else we need to give our muscles. Does anybody have an idea what that might be?</li><li>If students don't know, give them this clue: It's something you drink.</li><li>Water! Our muscles need lots of water!</li></ul>
Power Panther™ engaged in several different physical activities	<ul> <li>Physical activity is also important for our muscles. Tell me some examples of a physical activity that exercises muscles.</li> <li>(Wait for responses and accept almost any activity—running, riding bike, riding skateboard, swimming, etc.)</li> <li>Now we're going to stretch our muscles.</li> <li>Instruct all students to stand and stretch arm muscles.</li> <li>You have one more stop in the bodythe skin. Are you ready to move to the skin?</li> </ul>

# Station 10 – Skin

#### **Key Concept**

Power Panther<sup>™</sup> says, EAT SMART. Nutrients in our food help the skin heal itself. Power Panther<sup>™</sup> says, PLAY HARD. Outdoor exercise helps build a strong body.

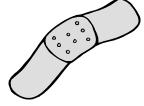
#### **Key Outcomes**

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

### **Station Design Ideas**

Outline skin station with large pictures of bandage strips and hands that are laminated or create a large shield, indicating the protective role skin plays for the body. You might construct a large bar of soap or set up a bright lamp and beach umbrella.





# Write in Your Own Design Ideas:

### **Teaching Aids You Will Need to Provide:**

• Large skin panel with cut on one side and bandage strips on the other side.

### **Suggested Costume for Presenter**

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

Station 10 – Skin Flipbook	
Graphics – In Traveling Trunk on flipbook	Script
	You are now on the inside of the skin. <i>Point to picture in flipbook</i> .
	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 and dairy groups. 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.

Station 10 – Skin Flipbook	
Graphics – In Traveling Trunk on flipbook	Script
	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.
	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.
Person with too much sun exposure	<i>Point to picture of person with too much sun exposure.</i> 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 <sup>™</sup> . Can anybody tell me how he is protecting his skin? <i>(Wearing a helmet, knee pads, elbow pads)</i>
	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.

Station 10 – Skin Flipbook	
Script	
Now you're ready to leave the body through that cut	
in the skin. As you leave, you will travel along the Power Panther™ Pathway to Life to help you remember everything you've learned today.	

Station 11 – Pathway to Life	
Graphics – In Traveling Trunk on flipbook	·
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 the Food Guide Pyramid</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 different groups in the Food Guide Pyramid. 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? ( <i>Approximately 20 feet</i> )
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 – In Traveling Trunk on flipbook	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 <sup>TM</sup> is showing you his strong muscles. Foods from the meat group help build muscle. What is the nutrient we get from the meat group? It starts with a P(protein).
Power Panther™ saying "ooo…smooth"	Power Panther™ is showing you his smooth, healthy skin.
Washing hands	Why is it important to wash your hands? ( <i>To get rid of the germs</i> ) 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?