



HEALTH IN ACTION PATCH PROGRAM

Girl Scout Juniors and Cadettes



HEALTH IN ACTION PATCH PROGRAM

Girl Scout Juniors and Cadettes

Education

Do at least one of the following:

- **Learn about the body.** Read “Your Heart and Circulatory System” (*Appendix 1*). Fill out the heart diagram, using the answer key to help you label the structures of the heart. Learn about the warning signs of a heart attack or stroke, and present what you learned to your troop, friends, or family.
- **Practice healthy eating habits.** Complete the MyPlate Pledge Form (*Appendix 2*) and pledge to become a MyPlate Champion. Make a plan for ways you can change how you eat for a healthier you, and create a healthy meal on the “Choose MyPlate” picture.
 - Visit the **MyPlate Champion** website: <https://www.choosemyplate.gov/kids-become-my-plate-champion> for more information.
- **Explore health careers.** Have a health care professional come to a troop meeting to talk about their career, or interview them one-on-one. Before the meeting, create a list of questions to ask about their job.

Hands-On

Do at least one of the following:

- **Build a body model.** Build your own heart or lung model (*Appendix 3*) to learn more about how these organs work. As you build the model, talk about each function of the heart or lung and why it is important.
- **Make a snack.** Make several different healthy snacks, trying to use some new foods. Discuss what makes these options healthy. Write down the snack recipe to hand out so friends or troop members can try it at home.
- **Rethink your drink.** Track how much water you drink each day for a week, aiming for eight cups a day. Stay hydrated, and bring a water bottle with you everywhere you go. Avoid drinking sugary beverages like soda.

Health in Action

Do at least one of the following:

- **Track your activity.** Log your physical activity for one week. Aim for 30 minutes activity at least five days of the week.
- **Prepare for a troop outing.** Make a meal plan and grocery list for an upcoming troop or family outing. Planning ahead helps to stick to a balanced meal plan — be sure to include fruits, vegetables, grains, dairy, and lean protein!
 - Use the Choose MyPlate “Build a Healthy Meal” handout (*Appendix 4*) to help guide your meal plan
- **Journal.** Be a role model to your troop mates and friends by completing a Kindness Journal. Write down ten acts of kindness you provided to your friends and family this month. Being kind is good for your health and well-being.

Family

Do at least one of the following:

- **Sweat it out.** Get physical and go for a walk or hike with your family for at least a half hour. Visit a state or county park, or go for a walk in your neighborhood. Create a log of your weekly activity.
- **Branch out.** Design and complete a family health tree (*Appendix 5*). Talk about the importance of knowing the health history of your family.
- **Set goals.** Make a pledge with your family to improve your health habits. Set at least three health-focused goals and celebrate your success when you accomplish them. Try to stick with your plan for one month. Use the support of your family to help you be successful.



HEALTH IN ACTION PATCH PROGRAM

Girl Scout Juniors and Cadettes

Appendix 1

- [Your Heart & Circulatory System article](#)
- [Heart diagram](#)

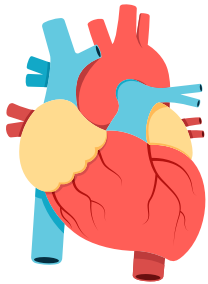


HEALTH IN ACTION PATCH PROGRAM

Your Heart & Circulatory System

We see and hear about hearts everywhere. A long time ago, people even thought that their emotions came from their hearts; maybe because the heart beats faster when a person is scared or excited. Now we know that emotions come from the brain, and in this case, the brain tells the heart to speed up. So what's the heart up to, then? How does it keep busy? What does it look like? Let's find out.

The Heart Is a Muscle



Your heart is really a muscle. It's located a little to the left of the middle of your chest, and it's about the size of your fist. There are lots of muscles all over your body — in your arms, in your legs, in your back, even in your behind.

But the heart muscle is special because of what it does. The heart sends blood around your body. The blood provides your body with the oxygen and nutrients it needs. It also carries away waste.

Your heart is sort of like a pump, or two pumps in one. The right side of your heart receives blood from the body and pumps it to the lungs. The left side of the heart does the exact opposite: it receives blood from the lungs and pumps it out to the body.

Parts of the Heart

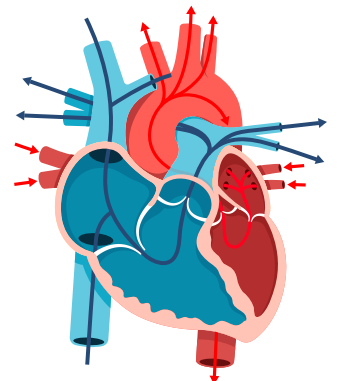
The heart is made up of four different blood-filled areas, and each of these areas is called a chamber. There are two chambers on each side of the heart. One chamber is on the top and one chamber is on the bottom. The two chambers on top are called the **atria** (say: AY-tree-uh). If you're talking only about one, call it an atrium. The atria are the chambers that fill with the blood returning to the heart from the body and lungs. The heart has a left atrium and a right atrium.

The two chambers on the bottom are called the **ventricles** (say: VEN-trih-kulz). The heart has a left ventricle and a right ventricle. Their job is to squirt out the blood to the body and lungs. Running down the middle of the heart is a thick wall of muscle called the **septum** (say: SEP-tum). The septum's job is to separate the left side and the right side of the heart.

The atria and ventricles work as a team — the atria fill with blood, then dump it into the ventricles. The ventricles then squeeze, pumping blood out of the heart. While the ventricles are squeezing, the atria refill and get ready for the next contraction. So when the blood gets pumped, how does it know which way to go?

Well, your blood relies on four special valves inside the heart. A valve lets something in and keeps it there by closing — think of walking through a door. The door shuts behind you and keeps you from going backward.

Two of the heart valves are the **mitral** (say: MY-trul) valve and the **tricuspid** (say: try-KUS-pid) valve. They let blood flow from the atria to the ventricles. The other two are called the **aortic** (say: ay-OR-tik) valve and **pulmonary** (say: PUL-muh-ner-ee) valve, and they're in charge of controlling the flow as the blood leaves the heart. These valves all work to keep the blood flowing forward. They open up to let the blood move ahead, then they close quickly to keep the blood from flowing backward.



How the Heart Beats

How does the heart beat? Before each beat, your heart fills with blood. Then its muscle contracts to squirt the blood along. When the heart contracts, it squeezes — try squeezing your hand into a fist. That's sort of like what your heart does so it can squirt out the blood. Your heart does this all day and all night, all the time. The heart is one hard worker!

Continue on next page »

How Blood Circulates

You probably guessed that the blood just doesn't slosh around your body once it leaves the heart. It moves through many tubes called arteries and veins, which together are called blood vessels. These blood vessels are attached to the heart. The blood vessels that carry blood away from the heart are called arteries. The ones that carry blood back to the heart are called veins.

The movement of the blood through the heart and around the body is called **circulation** (say: sur-kyoo-LAY-shun), and your heart is really good at it — it takes less than 60 seconds to pump blood to every cell in your body.

Your body needs this steady supply of blood to keep it working right. Blood delivers oxygen to all the body's cells. To stay alive, a person needs healthy, living cells. Without oxygen, these cells would die. If that oxygen-rich blood doesn't circulate as it should, a person could die.

The left side of your heart sends that oxygen-rich blood out to the body. The body takes the oxygen out of the blood and uses it in your body's cells. When the cells use the oxygen, they make carbon dioxide and other stuff that gets carried away by the blood. It's like the blood delivers lunch to the cells and then has to pick up the trash!

The returning blood enters the right side of the heart. The right ventricle pumps the blood to the lungs for a little freshening up. In the lungs, carbon dioxide is removed from the blood and sent out of the body when we exhale. What's next? An inhale, of course, and a fresh breath of oxygen that can enter the blood to start the process again. And remember, it all happens in about a minute!

Listen to the Lub-Dub

When you go for a checkup, your doctor uses a stethoscope to listen carefully to your heart. A healthy heart makes a lub-dub sound with each beat. This sound comes from the valves shutting on the blood inside the heart.

The first sound (the lub) happens when the mitral and tricuspid valves close. The next sound (the dub) happens when the aortic and pulmonary valves close after the blood has been squeezed out of the heart. Next time you go to the doctor, ask if you can listen to the lub-dub, too.

Pretty Cool — It's My Pulse!

Even though your heart is inside you, there is a cool way to know it's working from the outside. It's your pulse. You can find your pulse by lightly pressing on the skin anywhere there's a large artery running just beneath your skin. Two good places to find it are on the side of your neck and the inside of your wrist, just below the thumb.

You'll know that you've found your pulse when you can feel a small beat under your skin. Each beat is caused by the contraction (squeezing) of your heart. If you want to find out what your heart rate is, use a watch with a second hand and count how many beats you feel in one minute. When you are resting, you will probably feel between 70 and 100 beats per minute.

When you run around a lot, your body needs a lot more oxygen-filled blood. Your heart pumps faster to supply the oxygen-filled blood that your body needs. You may even feel your heart pounding in your chest. Try running in place or jumping rope for a few minutes and taking your pulse again — now how many beats do you count in one minute?

Keep Your Heart Happy

Most kids are born with a healthy heart and it's important to keep yours in good shape. Here are some things that you can do to help keep your heart happy:

- Remember that your heart is a muscle. If you want it to be strong, you need to exercise it. How do you do it? By being active in a way that gets you huffing and puffing, like jumping rope, dancing, or playing basketball. Try to be active every day for at least 30 minutes! An hour would be even better for your heart!
- Eat a variety of healthy foods and avoid foods high in unhealthy fats, such as saturated fats and trans fats (reading food labels can help you figure out if your favorite snacks contain these unhealthy ingredients).
- Try to eat at least five servings of fruits and vegetables each day.
- Avoid sugary soft drinks and fruit drinks.
- Don't smoke. It can damage the heart and blood vessels.

Your heart deserves to be loved for all the work it does. It started pumping blood before you were born and will continue pumping throughout your whole life.

Reviewed by: Steven Dowshen, MD | Date reviewed: May 2018

Note: All information on KidsHealth® is for educational purposes only. For specific medical advice, diagnoses, and treatment, consult your doctor.
© 1995- 2018 The Nemours Foundation. All rights reserved.

Images provided by The Nemours Foundation, iStock, Getty Images, Veer, Shutterstock, and Clipart.com.

HEALTH IN ACTION PATCH PROGRAM

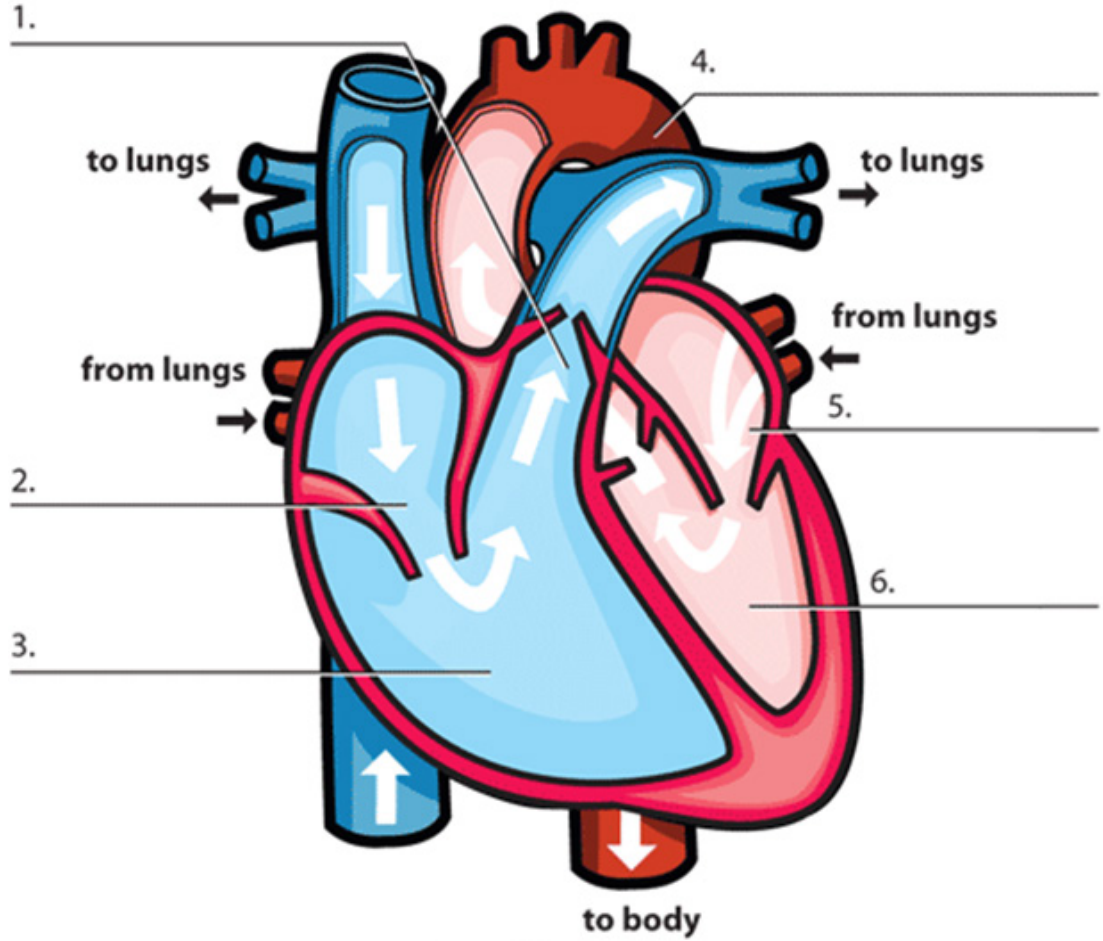
Heart Diagram

Use the word bank words to fill in the diagram of the heart. Need help? Find the solution on the next page.

HOW THE BODY WORKS

The Heart

Directions: Print out, label the parts of the heart, and circle the four valves.

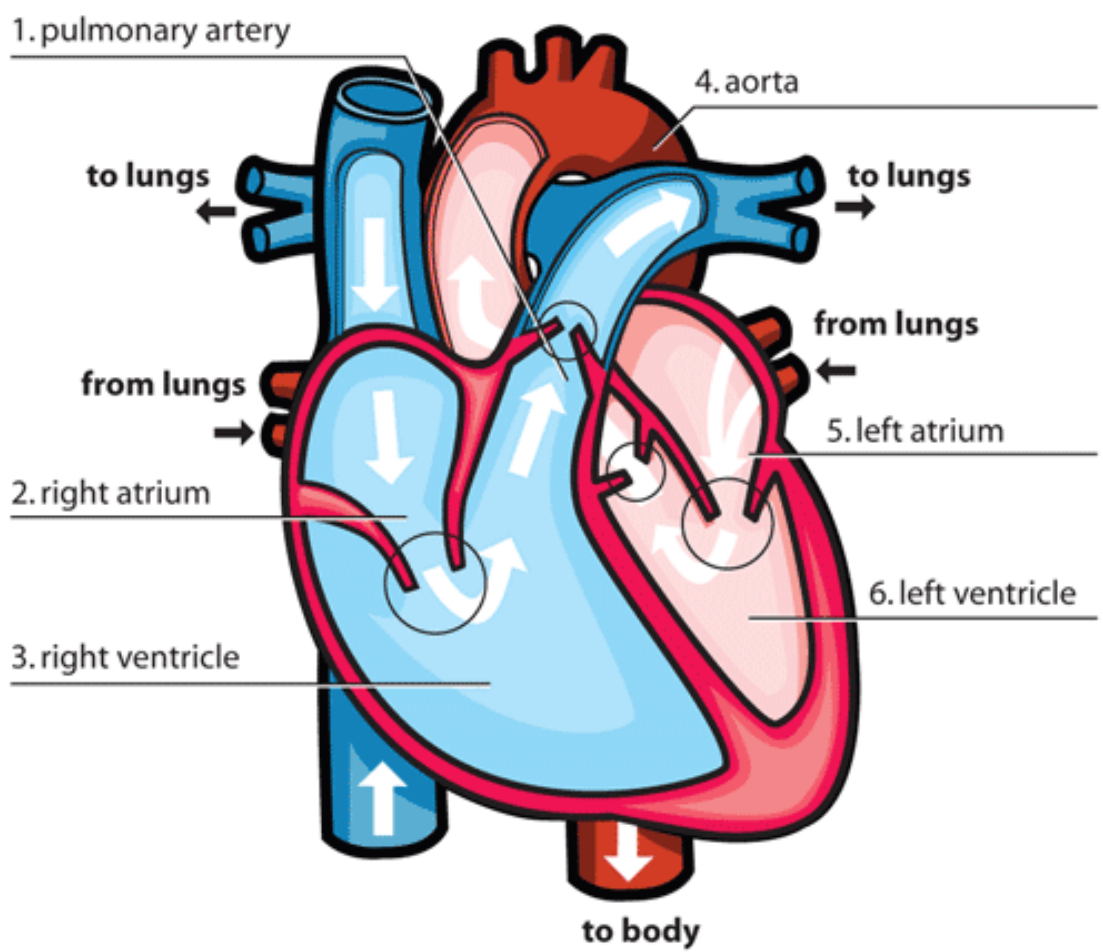


WORD BANK		
left ventricle	right atrium	pulmonary artery
right ventricle	left atrium	aorta

Heart Diagram Solutions

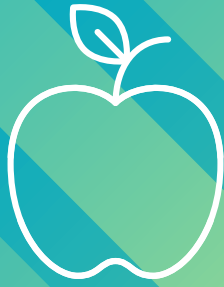
HOW THE BODY WORKS

The Heart Solution



WORD BANK

left ventricle	right atrium	pulmonary artery
right ventricle	left atrium	aorta



HEALTH IN ACTION PATCH PROGRAM

Girl Scout Juniors and Cadettes

Appendix 2

- [MyPlate Champion pledge](#)

- Choose MyPlate picture



HEALTH IN ACTION PATCH PROGRAM



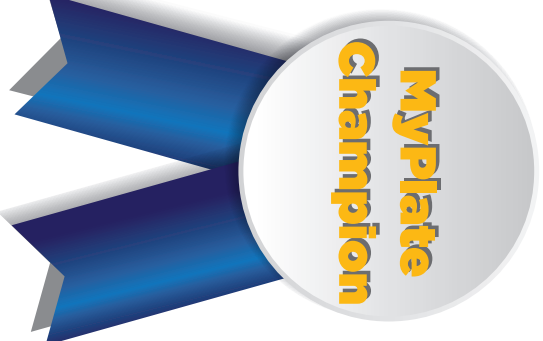
Become a MyPlate Champion!

Pledging to be a MyPlate Champion is a promise to eat healthy and be active every day. Learning how to make healthy choices at home and at school is an important part of taking care of you. The first step is to know which choices are best for you. Use ideas from the list below to get started.

MyPlate Champion List

- Eat more fruits and veggies. Make half your plate fruits and vegetables every day!
- Try whole grains. Ask for oatmeal, whole-wheat breads, or brown rice at meals.
- Re-think your drink. Drink fat-free or low-fat milk or water instead of sugary drinks.
- Focus on lean protein. Choose protein foods like beans, fish, lean meats, and nuts.
- Slow down on sweets. Eat sweets, like cakes or cookies, once in a while and in small amounts.
- Be active your way. Find ways to exercise and be active for at least one hour a day like walking to school, riding your bike, or playing a sport with friends.

Can you pledge to eat healthy and be active? If you answered yes, you have what it takes to be a MyPlate Champion! Complete your MyPlate Champion Certificate and work on changing the way you eat. Work with your family to focus on the MyPlate Champion List.



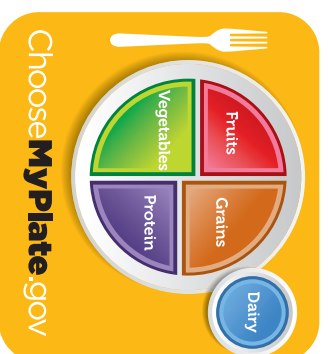
MyPlate Pledge

for

I pledge to be a MyPlate Champion. I will choose healthy foods from the five food groups at school and at home (or elsewhere) to keep my body and mind healthy. I pledge to find fun ways to be active everyday. I will also encourage my friends and family to make smart food choices and be active.

I pledge MyPlate! Everyday I will:

- Eat more fruits & veggies.
- Try whole grains.
- Re-think my drink.

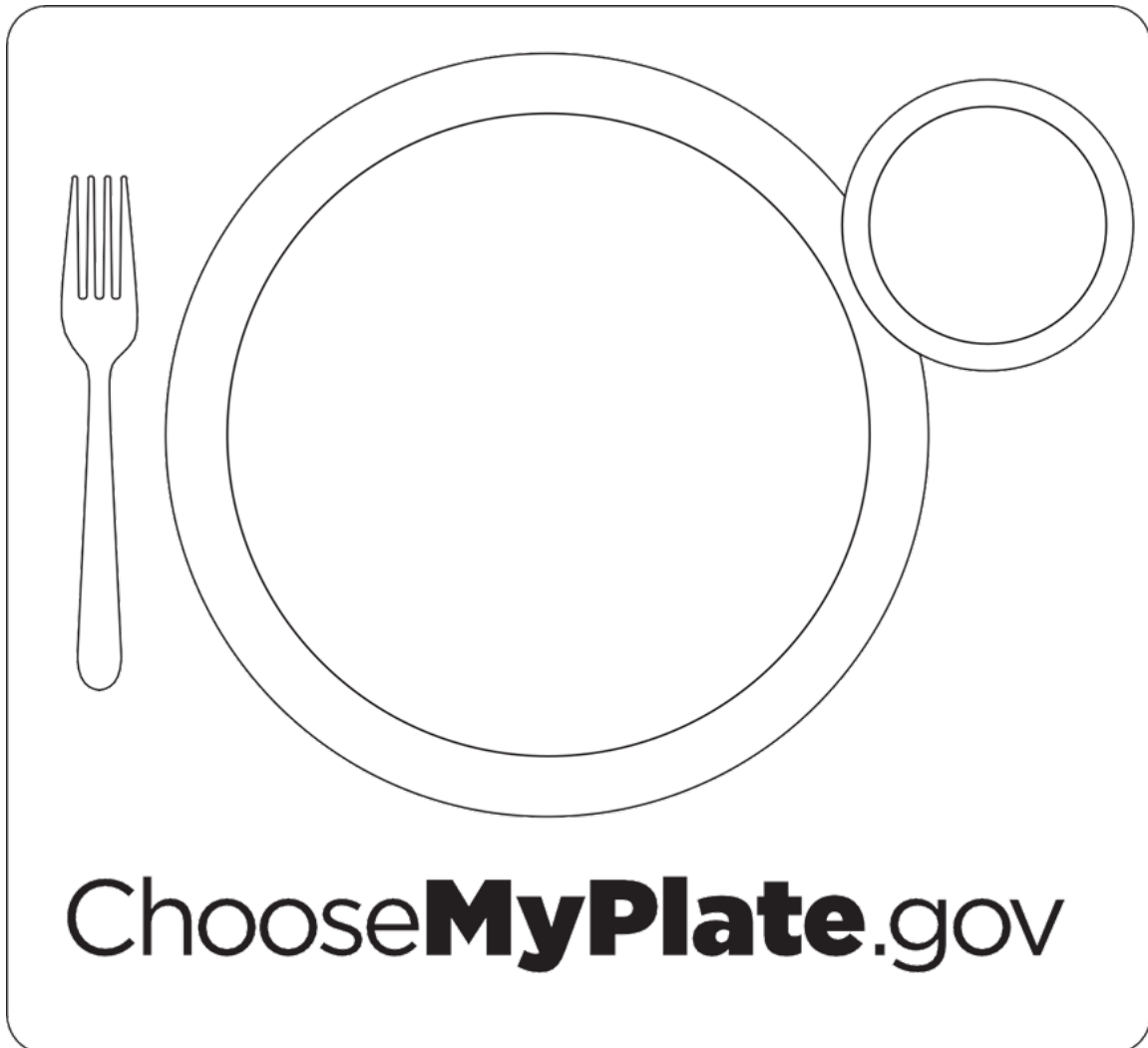
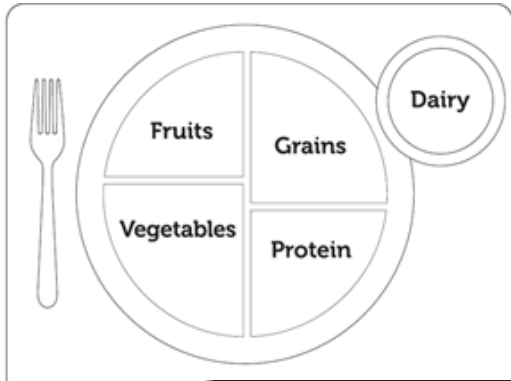


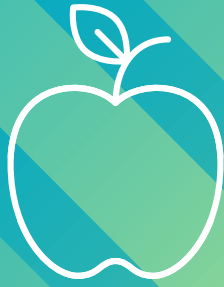
- Focus on lean protein.
- Slow down on sweets.
- Be active my way.

HEALTH IN ACTION PATCH PROGRAM

I pledge MyPlate!

Create a healthy meal by drawing what you might have for a healthy dinner! Be creative. Use the image below to help you create your healthy plate.





HEALTH IN ACTION PATCH PROGRAM

Girl Scout Juniors and Cadettes

Appendix 3

• [Heart model instructions](#)

• [Lung model instructions](#)



HEALTH IN ACTION

PATCH PROGRAM

Lung model instructions

Supplies

- empty 2-liter bottle
- plastic bag (trash bag or thick grocery bag)
- thick rubber band
- balloon
- drinking straw
- masking tape
- modeling clay
- scissors
- an adult to help



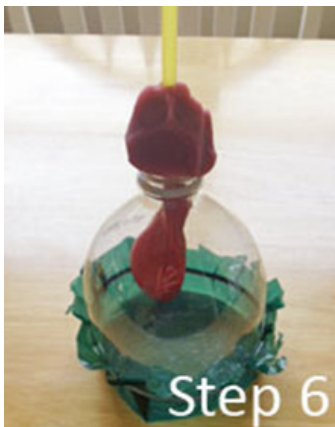
1. Have an adult help you cut the 2-liter bottle in half; you will only use the top part; discard the bottom and the bottle cap.
2. Cut a square of plastic from the bag. Make it big enough to cover the large opening of the cut bottle (about 8"). Don't worry about getting the edges perfectly straight!



3. Stand the bottle top on the table and place the sheet of plastic over the large opening. Use a large rubber band to secure it around the bottle. Gently pull the edges of the plastic so it is tight across the top.



4. Cut off the excess plastic next to the rubber band.
5. Put the straw into the balloon and seal the opening around the straw with several pieces of tape. Blow gently on the end of the straw to make sure air goes into the balloon. If the balloon doesn't puff out a little, seal it around the straw better so air can't escape.



6. Put the balloon end into the bottle's opening and use modeling clay to secure the straw to the bottle so that air can only pass through the straw.

7. Fold a piece of tape in half with sticky sides together, leaving the ends exposed (only stick the tape together in the middle). Attach the sticky ends to the bottom of the plastic.



8. Use the tape tab as a handle and gently pull down slightly on the plastic. Watch what happens to the balloon. Now push up gently while watching the balloon.



What Happened:

The contraption you built is a model of how your lungs work! The plastic at the bottom works like your diaphragm — a strong muscle that expands and contracts to cause your lungs to fill with air and then empty out again. The movement of the balloon matches your breathing — when you breathe in, your lungs fill with air just like the balloon did. That's because the diaphragm expanded, making room for air to get in through the straw (which represents your airway, or trachea). When you breathe out, your diaphragm contracts (or squeezes in), pushing all the air out of your lungs. The same thing happened in your soda bottle model — when you pulled down on the plastic, the balloon inflated slightly and when you pushed up, the balloon deflated! Inside your body, you have two lungs that work together, and the diaphragm is below them. Air goes in and out of both of your lungs at the same time. This model just represents one lung.

HEALTH IN ACTION PATCH PROGRAM

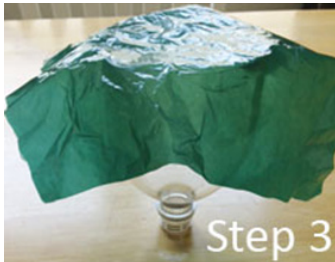
Lung model instructions

Supplies

- empty 2-liter bottle
- plastic bag (trash bag or thick grocery bag)
- thick rubber band
- balloon
- drinking straw
- masking tape
- modeling clay
- scissors
- an adult to help



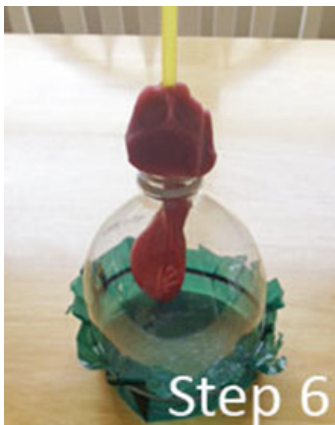
1. Have an adult help you cut the 2-liter bottle in half; you will only use the top part; discard the bottom and the bottle cap.
2. Cut a square of plastic from the bag. Make it big enough to cover the large opening of the cut bottle (about 8"). Don't worry about getting the edges perfectly straight!



3. Stand the bottle top on the table and place the sheet of plastic over the large opening. Use a large rubber band to secure it around the bottle. Gently pull the edges of the plastic so it is tight across the top.



4. Cut off the excess plastic next to the rubber band.
5. Put the straw into the balloon and seal the opening around the straw with several pieces of tape. Blow gently on the end of the straw to make sure air goes into the balloon. If the balloon doesn't puff out a little, seal it around the straw better so air can't escape.



6. Put the balloon end into the bottle's opening and use modeling clay to secure the straw to the bottle so that air can only pass through the straw.

7. Fold a piece of tape in half with sticky sides together, leaving the ends exposed (only stick the tape together in the middle). Attach the sticky ends to the bottom of the plastic.



8. Use the tape tab as a handle and gently pull down slightly on the plastic. Watch what happens to the balloon. Now push up gently while watching the balloon.



What Happened:

The contraption you built is a model of how your lungs work! The plastic at the bottom works like your diaphragm — a strong muscle that expands and contracts to cause your lungs to fill with air and then empty out again. The movement of the balloon matches your breathing — when you breathe in, your lungs fill with air just like the balloon did. That's because the diaphragm expanded, making room for air to get in through the straw (which represents your airway, or trachea). When you breathe out, your diaphragm contracts (or squeezes in), pushing all the air out of your lungs. The same thing happened in your soda bottle model — when you pulled down on the plastic, the balloon inflated slightly and when you pushed up, the balloon deflated! Inside your body, you have two lungs that work together, and the diaphragm is below them. Air goes in and out of both of your lungs at the same time. This model just represents one lung.



HEALTH IN ACTION PATCH PROGRAM

Girl Scout Juniors and Cadettes

Appendix 4

- [Healthy Meal handout](#)



HEALTH IN ACTION PATCH PROGRAM

Healthy Meal handout



10
tips
Nutrition
Education Series



Based on the
Dietary
Guidelines
for Americans

Build a healthy meal

Each meal is a building block in your healthy eating style. Make sure to include all the food groups throughout the day. Make fruits, vegetables, grains, dairy, and protein foods part of your daily meals and snacks. Also, limit added sugars, saturated fat, and sodium. Use the [MyPlate Daily Checklist](#) and the tips below to meet your needs throughout the day.

1 Make half your plate veggies and fruits

Vegetables and fruits are full of nutrients that support good health. Choose fruits and red, orange, and dark-green vegetables such as tomatoes, sweet potatoes, and broccoli.



2 Include whole grains

Aim to make at least half your grains whole grains. Look for the words "100% whole grain" or "100% whole wheat" on the food label. Whole grains provide more nutrients, like fiber, than refined grains.



3 Don't forget the dairy

Complete your meal with a cup of fat-free or low-fat milk. You will get the same amount of calcium and other essential nutrients as whole milk but fewer calories. Don't drink milk? Try a soy beverage (soymilk) as your drink or include low-fat yogurt in your meal or snack.



4 Add lean protein

Choose protein foods such as lean beef, pork, chicken, or turkey, and eggs, nuts, beans, or tofu. Twice a week, make seafood the protein on your plate.



5 Avoid extra fat

Using heavy gravies or sauces will add fat and calories to otherwise healthy choices. Try steamed broccoli with a sprinkling of low-fat parmesan cheese or a squeeze of lemon.

6 Get creative in the kitchen

Whether you are making a sandwich, a stir-fry, or a casserole, find ways to make them healthier. Try using less meat and cheese, which can be higher in saturated fat and sodium, and adding in more veggies that add new flavors and textures to your meals.

7 Take control of your food

Eat at home more often so you know exactly what you are eating. If you eat out, check and compare the nutrition information. Choose options that are lower in calories, saturated fat, and sodium.



8 Try new foods

Keep it interesting by picking out new foods you've never tried before, like mango, lentils, quinoa, kale, or sardines. You may find a new favorite! Trade fun and tasty recipes with friends or find them online.

9 Satisfy your sweet tooth in a healthy way

Indulge in a naturally sweet dessert dish—fruit! Serve a fresh fruit salad or a fruit parfait made with yogurt. For a hot dessert, bake apples and top with cinnamon.

10 Everything you eat and drink matters

The right mix of foods in your meals and snacks can help you be healthier now and into the future. Turn small changes in how you eat into your MyPlate, MyWins.



HEALTH IN ACTION PATCH PROGRAM

Girl Scout Juniors and Cadettes

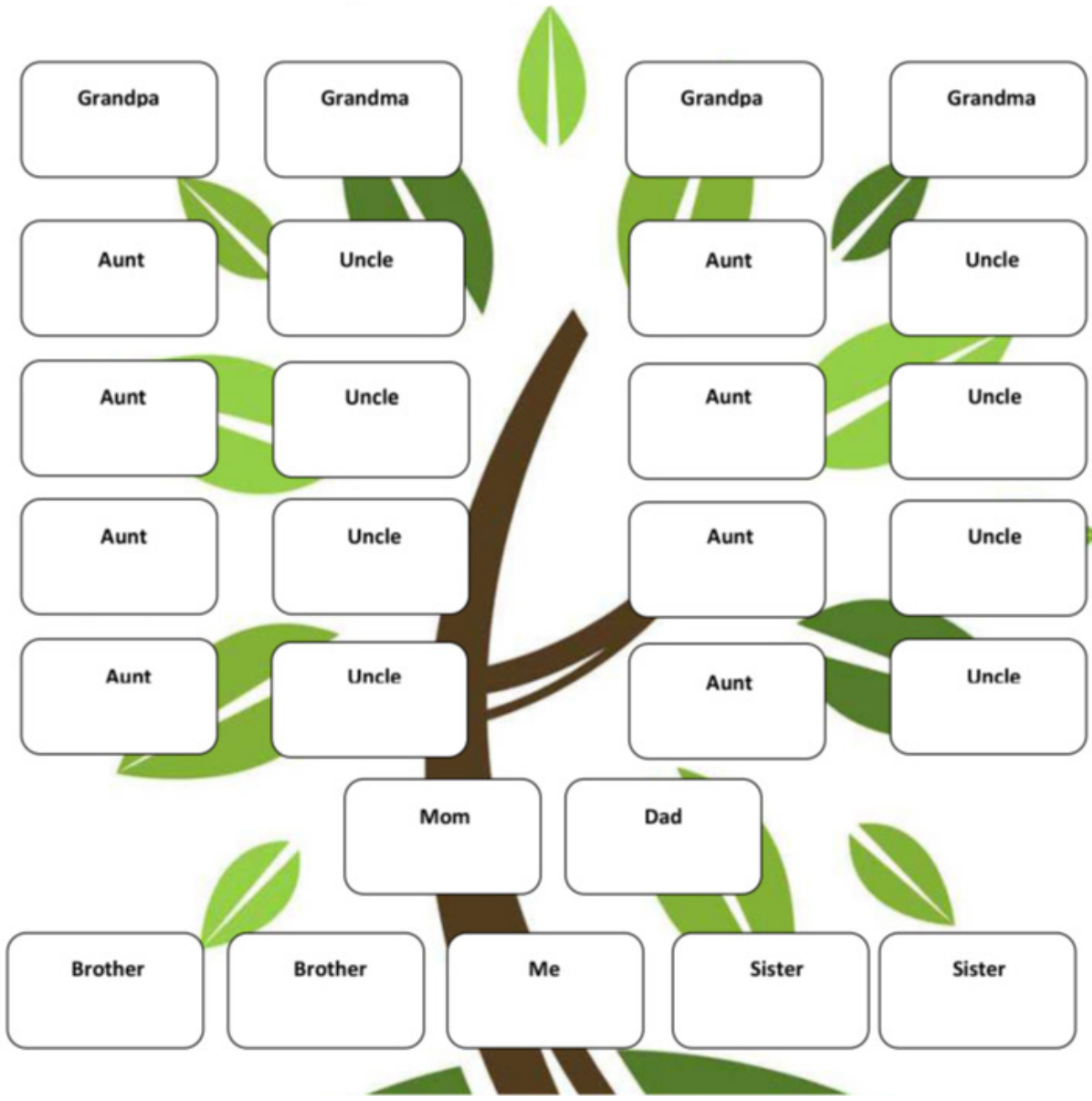
Appendix 5

- [Family Health Tree](#)



HEALTH IN ACTION PATCH PROGRAM

Family health tree



Use this tree to discover which health conditions, like heart disease, may be in your family. With the help of your family, fill in the boxes with the health conditions of your blood relatives. Be sure to complete both sides of the family. By knowing which health conditions and diseases are in your family, you can make the right healthy choices to help prevent those conditions from being passed down to you. Post your completed family tree on the refrigerator to remind you and your family of the importance of making healthy choices.

