

## 4TH - 7TH GRADE TOOLKIT

### TIPS FOR PRESENTATION STYLE

- This age starts to understand abstract concepts, but needs to link them to concrete examples.
- They have been listening all day, so moving and engagement will be appealing.

### INTRODUCING FAMILY MEDICINE (5-10 min)

- Teach! “I’m a Family Medicine doctor at \_\_\_\_\_.”
- What does a doctor do?
- Have you been to the doctor?
- What does a doctor look like?

*Actually, a doctor looks like all of you!*

Could consider a photo frame or photo booth type item that says future family doc

- Can you help me solve some doctor problems?  
Would anyone like to be my pretend patient?

\_\_\_\_\_ (pretend patient’s name) is here with ear pain. What should I do?

Consider bringing portable otoscope for this, or change chief complaint to MSK if you don’t have this.

First, I’m going to ask \_\_\_\_\_ to tell me the story. Tell me about how your ear started hurting!

Sometimes grown ups don’t tell us the story as well as you do, so I have to ask them a few more questions, like “did you stick anything in your ear? What medicine makes it feel better? Does it hurt a lot or a little? Has this happened before?”

After I ask lots of questions, I take a look!

Once I hear the story and examine \_\_\_\_\_, I can use my training to figure out what’s going on! Then I can help you feel better either with medicine or by helping you not to feel worried about it.

- Does anyone know how I became a doctor? (if silent crowd, could joke - “did I wake up and say I’m going to be a doctor today and just start doctoring?”)

Explain learning builds.

Consider labeling blocks or empty cardboard boxes with stages of education (elementary school, middle school, high school, college, medical school, residency, fellowship). Ask kids to volunteer to try to stack them in the correct order.

- What sounds fun about becoming a doctor?

## HEART HEALTH (15-20 min)

- Teach!

Sample Video option - [How the Heart Works](#) (6:15 cartoon style)

<https://kidshealth.org/en/kids/csmovie.html?WT.ac=en-k-htbw-main-page-a>

The heart is a muscle, and it works like a pump!

How does the heart beat? Before each beat, your heart fills with blood. Then its muscle contracts to squirt the blood toward its destination. When the heart contracts, it squeezes — try squeezing your hand into a fist.

Does anyone know the size of an average grown up heart?

Answer = about the size of an adult fist!

What about how much a grown up heart weighs?

Answer = The heart weighs between about 10 to 12 ounces (280 to 340 grams) in men and 8 to 10 ounces (230 to 280 grams) in women. This is about the weight of a soda can.

If your office has a model heart, this would be a good prop to bring in.

The heart is surrounded by a protective bag called the pericardium. It's like a thin balloon. If you have technology, use an image of the heart here. If not, consider handing out copies of heart anatomy or drawing a basic heart on the board.

[Sample handout:](#) <https://kidshealth.org/en/kids/bfs-csactivity.html>

While referencing above diagrams: There are four parts to the part: two atria and two ventricles. Blood that is empty of oxygen (blue blood) returns from the body into the right atrium. It passes the tricuspid valve (like a door that only opens one way) into the right ventricle. Ventricles are the strong muscular parts of the heart, while atria mostly hold blood. The right ventricle pushes the blood through the pulmonic valve into the lungs, where the blood is filled with oxygen. The red/oxygen-full blood returns to the heart from the lungs into the left atrium. The left atrium passes the blood through the mitral valve (door) into the left ventricle. The left ventricle is the strongest part of the heart, and it pushes the oxygen-full blood out to the body through the aortic valve into the aorta (the biggest blood pipe in your body).

Inside the walls of the heart are the electrical wires of the heart, just like electrical wires in our walls here! This electrical system tells the parts of the heart when to squeeze and when the doors can open and shut.

Let's work on labeling the heart diagram based on this.

Even though your heart is inside you, there is a cool way to know it's working from the outside. It's your pulse.

[SAMPLE ARTICLE:](#) This article uses kid-friendly language to explain the cardiovascular system <https://kidshealth.org/en/kids/heart.html>, and a summary is above.

- Do!

Show children how to find their radial pulse. May need to employ teachers to help.  
Take turns using stethoscope to auscultate.

- Do!

You can keep your heart happy and strong by working the muscle - through exercise like running, jumping, and playing sports!

- Set a timer for one minute and ask the children to run in place or do jumping jacks. Immediately have them feel pulse. Does it feel faster or slower?
- Bonus if extra time: Can consider bringing a pig's heart from the butcher if you feel comfortable and teacher allows. If so, would bring a cooler and a box of small or extra small gloves.

### EAT SMART MOVE MORE! (15-20 min)

- Teach!

You also keep your heart healthy by eating lots of powerful foods. The heart actually needs oxygen through blood to work the pump too. Around the outside of the heart are large blood vessels. When these pipes get clogged, heart attacks can happen or the heart may not pump as well when it is weak because of not enough blood supply. The pipes clog when our body gets a lot of cholesterol or certain types of fat.

Drinking lots of water and eating a rainbow of fruits and vegetables are powerful choices to keep your heart strong!

- Do! Activities practicing identifying healthy foods:

We can think about foods as GO (eat these anytime and as much as you want!), SLOW (eat these sometimes), and WHOA (eat these treats or less nutritious foods every once in a while).

[Go, Slow, and Whoa flashcards](#) - have volunteers help hold up for the class.

<https://www.nhlbi.nih.gov/health/educational/wecan/downloads/gswflashcards.pdf>

[More on go, slow, and whoa foods](#). <https://www.nhlbi.nih.gov/health/educational/wecan/downloads/gswtips.pdf>

[Go slow whoa and activity quiz](#): [https://kidshealth.org/classroom/prekto2/problems/conditions/obesity\\_quiz.pdf](https://kidshealth.org/classroom/prekto2/problems/conditions/obesity_quiz.pdf)

[Quiz answers](#): [https://kidshealth.org/classroom/prekto2/problems/conditions/obesity\\_quiz\\_answers.pdf](https://kidshealth.org/classroom/prekto2/problems/conditions/obesity_quiz_answers.pdf)

- Teach!

Sugar tastes great, right! And a little is ok. But sugar might be sneaking up on you in your drinks. The problem with sugar is that it gives our body calories without giving us any nutrients. And those calories can eventually stress out our heart and our pancreas (another organ in your belly that helps regulate your body's energy). Let's play a game to see if you can guess how much sugar is in some of our drinks.
- Do! Sugar shuffle game. Print individual copies of both game board and answer cards or use game board document on the screen and print answer cards for students to hold up.

[Download](#) Game board document

[Download](#) Answer cards.

[Download](#) Answer document for teacher/instructor:

- Supplementary recommendations:

Books to Read to Class: [The Magic School Bus Inside the Human Body](#) by Joanna Cole

Heart Health Worksheets (in class or take home)

[Haiku.](#)

[Word search](#)

[Labeling diagram](#) (for younger classes you may need to write the answers on the board to choose from)

[Take Home Exercise for families](#) and

[Fitness worksheet](#)

Sources: Some of the sample handouts come from KidsHealth in the Classroom, which comes from KidsHealth, the most-visited site on the Web for information about health, behavior, and development from before birth through the teen years. KidsHealth has been providing free online information for kids, teens, and parents since 1995. KidsHealth in the Classroom and KidsHealth are part of The Nemours Foundation, created by philanthropist Alfred I. duPont in 1936 to improve children's health. KidsHealth in the Classroom offers free health education resources for PreK through 12th grade, all aligned with National Health Education Standards.