

Please note: Activities are member submitted and not approved prior to uploading by SHAPE America staff.

Name of Activity	
<b>Heart Squeeze</b>	
<b>Submitted by</b>	<b>Heidi Stan, 2014 National Health Teacher of the Year</b>
<b>National Standard(s)</b>	<b>Standard 7: Students will demonstrate the ability to practice health-enhancing behaviors and avoid or reduce health risks.</b>
<b>Grade Level Outcome or Performance Indicator</b>	<b>7.8.2 Demonstrate a variety of healthy practices and behaviors that will maintain or improve the health of self and others.</b>
<b>Activity Objective</b>	<b>By doing the Heart Squeeze activity, students will understand how hard the heart works to provide the body with oxygen via blood.</b>
<b>Grade(s)</b>	<b>6-8</b>
<b>Materials</b>	<b>One tennis ball per student or every two students.</b>
Activity Description	
<p>This is one activity that can be used in a series of stations or as an introductory activity for a lesson about the heart/cardiovascular system.</p> <p>By doing this activity students get an idea of how much force it takes to squeeze blood out of the heart and why exercising the heart is important for its function.</p> <p>The force needed to squeeze a tennis ball is similar to the force needed to squeeze blood out of the heart. Gather enough tennis balls so you have one ball for every two students (if you can get one for every student, the activity will proceed a bit faster, as you won't have to repeat every step). Ideally, you'll find someone who plays tennis and can get you as many dead balls as you could want - your physical education teacher might be able to help you find someone.</p> <div style="text-align: center;">  </div> <p>If you have the time, and feel inspired, you can draw a heart on the balls, but it's by no means necessary. Ask students to squeeze the ball as many times as they think the heart muscle squeezes in 15 seconds (they need to give the ball a good, solid squeeze). Their partner can time them, or you (the teacher) can call out the time for the whole class. Each student should record their squeezes. Allow the partner students to repeat this step.</p>	

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**Now the students will squeeze the ball each time the teacher counts. Call out one beat per second. Go for a full minute if your students can handle it. Repeat for the other students.**

**Gather students' feedback about squeezing the ball at the pace. Their hands will be rather tired.**

**Now tell them that pace was for a person at rest, but no one stays that still when they are awake.**

**Go for another full minute, this time calling out beats faster than one per second. You're aiming for about 80 counts in one minute. Repeat for the other students.**

**Have students discuss the amount of force they thought it would take the heart to pump out blood from the heart and how much force it actually took. Have students discuss ways to keep the heart healthy and strong.**

#### **Modifications**

***Include ways to modify this activity for advanced, lower level and inclusion students.***