Intended Audience:
• Youth and adults

Lesson Objectives:
Participants will:
• Learn how to check their heart rate.
• Compare resting heart rate with two different activity levels.

Time: 15 minutes

Equipment and supplies:
• Stopwatch
• Paper
• Pen or pencil

Do Ahead:
• Collect supplies.
• View a YouTube video showing how to check your pulse rate.

BACKGROUND
Physical activity is important to overall health. Your heart rate tells you how hard your body is working. The Physical Activity Guidelines for Americans recommend that children get 60 minutes per day of moderate to vigorous physical activity.

WHAT TO DO
Experience:

DIRECTIONS
1. Demonstrate how to calculate your heart rate by two methods:
   Carotid (neck) method (see left side of image): Find the carotid artery in your neck and lightly place your index and middle fingers together on one side of your neck just below your jawbone. Press lightly with your fingers until you feel your pulse.

   Wrist method (see right side of image): Turn your right arm so that the palm of your hand is facing up. Place your left index and middle fingers together on the right side of your right wrist. Press lightly until you feel a pulse. Do not use your thumb (because the thumb has a pulse of its own).
2. Use the stopwatch to time 15 seconds; record the number of beats and multiply by 4. Or you can record for a full 60 seconds. Have participants record their resting pulse rate.

3. Divide the group in half. Have half the participants walk, and have the other half of the participants do a fast paced activity (such as jumping jacks) for 1 minute.

4. Check heart rate again.

5. Have participants record this heart rate.

6. Ask these questions:
   - What is the difference between your resting and active heart rate? (The active heart rate is higher.)
   - What is the difference between the heart rates for the walking group and the jumping jacks group? (The rate for the jumping jacks group should be higher.)
   - What changes did you notice in your body when your heart rate increased? (Changes might include faster breathing, sweating, muscles feeling tired.)
   - What conclusions can you draw about activity level and heart (pulse) rate? (Pulse rate increases as activity level increases.)

7. If time permits, have participants calculate their maximum and target heart rate using the table below.

<table>
<thead>
<tr>
<th>Normal Heart Rate</th>
<th>Maximum Heart Rate</th>
<th>Target Heat Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children under 18</td>
<td>70 to 100 beats per minute</td>
<td>220 minus (your age) = maximum heart rate</td>
</tr>
<tr>
<td>Adults</td>
<td>60 to 100 beats per minute</td>
<td></td>
</tr>
<tr>
<td>Target Heat Rate</td>
<td>The range is 60% to 80% of maximum heart rate</td>
<td></td>
</tr>
</tbody>
</table>

Your target heart rate depends on how physically fit you are. For example, if you are not active and not physically fit, your target heart rate is a little lower than the target heart rate of someone who exercises every day. Your target heart rate can guide you to how hard you should exercise so you can get the most aerobic benefit from your workout.

**TALK IT OVER**

**Reflect:**
- What changes did you notice as you became more active?

**Generalize:**
- What did you notice about the different levels of physical activity and how it affected your heart rate?

**Apply:**
- How can you include more physical activity in your day?