

PULSE AND BLOOD PRESSURE LAB

A) PULSE

Pulse at REST

1. Place your first and second finger in the groove between the radius bone (on thumb side) and the tendon at the wrist and press lightly.
2. Count the number of beats in 10 seconds.
3. Multiply this by 6 to get the number of beats in 60 seconds (this # your pulse).
4. Add your pulse to the class data and record the class average.

beats/10 sec.	Pulse (beats/60 sec.)	Class (avg.)

Pulse after EXERCISE

1. Exercise moderately for 1 minute (run up stairs, pushups, jumping jacks, etc.).
2. Immediately take your wrist pulse.
3. Add your pulse to the class data and record the class average.

beats/10 sec.	Pulse (beats/60 sec.)	Class (avg.)

Discussion Questions

1. Was your pulse higher or lower than the class average? Suggest reasons for this.

2. Why can the heart beat be detected as a pulse? -----

3. Which artery is felt when taking the pulse at the wrist? -----
4. Which artery is felt when taking the pulse at the neck? -----
5. Would wrist or neck pulse be felt first following a heart beat? Why?

6. If an accident victim had a severed left subclavian artery, which pulse (neck or wrist) would be most affected? Why? -----

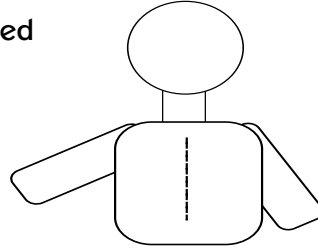
B) HEART SOUNDS

Heart Sounds at REST

1. Place a stethoscope on your own chest and listen for a heart sound. Locate the area where the heart sounds are loudest.
2. After 1 min. of moderate exercise, listen to your heart sounds again.

Discussion Questions

1. Indicate on the diagram where you located the clearest sound.



2. Did the sound of your heartbeat change after exercise? Describe what differences you heard.

3. What causes the characteristic heart sounds? -----

4. What causes heart murmurs? -----

5. When was the stethoscope first discovered? Describe the first stethoscope.

C) BLOOD PRESSURE

BP at REST

1. Make sure arm is wrist-up and at rest.
2. Roll sleeves up and place cuff just above elbow.
3. Place stethoscope bell under cuff on inner surface of arm.
4. Pump cuff to about 140-150 mm Hg then slowly release air while listening.
5. First thuds heard = Systolic Pressure.
6. Last thuds heard = Diastolic Pressure.
7. Do not move arm during reading.
8. Immediately release air after reading.
9. Add your BP to the class data and record the class average.

Systolic Pressure	Diastolic Pressure	BP (systolic/diastolic)	Class (avg.)

BP after EXERCISE

1. Exercise moderately for 1 minute (run up stairs, pushups, jumping jacks, etc.).
2. Take your BP immediately after exercise.
3. Add your BP to the class data and record the class average.

Systolic Pressure	Diastolic Pressure	BP (systolic/diastolic)	Class (avg.)

Discussion Questions

1. What was the effect of exercise on BP? _____

2. How does the body benefit from this change in BP during exercise? _____

3. What is considered a normal average adult BP? _____
4. How would the BP of an anxious patient visiting a doctor be different than if the patient is calm?

5. Would BP rise or fall if a patient suffers an aortic aneurism? _____
6. In atherosclerosis, plaque builds up in the arteries occluding the lumen. How would this affect BP? Is this an example of hypertension or hypotension? _____

7. Examine Figure 3 on pg. 260. Which part of the wave corresponds to:
 - atrial contraction? _____
 - ventricular contraction? _____
 - ventricular recovery? _____