

Blood Pressure and Pulse Lab

- Practice taking pulse and blood pressure before the lab begins

Part 1: Blood Pressure

- Recline for 5 min and then take BP. Record systolic and diastolic pressure.
- Recline for an additional 2 min
- Stand up and IMMEDIATELY take a standing BP. Record systolic and diastolic pressure

Results

Change (mm Hg)	Fitness Points
Rise of 8 or more	3
Rise of 2-7	2
No rise	1
Fall of 2-5	0
Fall of 6 or more	-1

Part 2: Pulse

- Stand at ease for 2 min and take the Pulse. Count the number of beats for 30 sec and multiply by 2. Record the standing pulse

Results

Pulse Rate (beats/min)	Fitness Points
60-70	3
71-80	3
81-90	2
91-100	1
101-110	1
111-120	0
121-130	0
131-140	-1

- Recline for 5 min and then take the Pulse

Results

Pulse Rate (beats/min)	Fitness Points
50-60	3
61-70	3
71-80	2
81-90	1
91-100	0
101-110	-1

- Stand up and IMMEDIATELY take a standing Pulse. Record the pulse
- Subtract the reclining pulse rate from the pulse rate immediately upon standing to determine the pulse rate increase

Results

Reclining Pulse (beats / min)	Pulse Rate Increase on Standing (# beats)				
	0-10	11-18	19-26	27-34	35-43
	Fitness Points				
50-60	3	3	2	1	0
61-70	3	2	1	0	-1
71-80	3	2	0	-1	-2
81-90	2	1	-1	-2	-3
91-100	1	0	-2	-3	-3
101-110	0	-1	-3	-3	-3

Final Results

- Excellent = 12-10 points
- Good = 9-7 points
- Fair = 6-3 points
- Poor = 2 or less points

Questions

1. What is the difference between blood pressure and pulse?
2. What are some factors that would increase blood pressure and heart rate?
3. What is the difference between systolic and diastolic pressure?
4. What division of the nervous system controls heart rate?
5. Explain why blood pressure and heart rate differ when measured in a reclining position and in a standing position.
6. Explain why high blood pressure is a health concern.
7. Explain why an athlete must exercise harder or longer to achieve a maximum heart rate than a person who is not as physically fit.
8. Research and explain why smoking causes a rise in blood pressure.