



Cardiovascular Physiology

► PROCEDURAL INQUIRIES ◀

Preparation

1. What is the path blood takes through the heart?
2. What do we mean when we say the heart is two functional syncytia?
3. What are the parts of the electrical conduction system through the heart?
4. What are the parts of the cardiac cycle and how is each part identified?

Experimentation

5. What is auscultation?
6. What are the four heart sounds?
7. What is the proper way to use a stethoscope?
8. What is the proper way to take a pulse?
9. What are the most easily studied pulse points?

10. What are some important pulse characteristics?
11. What is the proper way to take blood pressure?
12. What is the difference between systolic and diastolic blood pressure?
13. How do you determine the pulse pressure?
14. What does the cold pressor test demonstrate?
15. What is an easy way to take a venous blood pressure?
16. What is cardiovascular efficiency?
17. How do we test for cardiovascular efficiency?

Additional Inquiries

18. How would you describe a typical heart cell?
19. What is a general fatigue curve?
20. What is hypertension?

Key Terms

Amplitude	Hypertension
Arterial Blood Pressure	Korotkoff's Sound
Atrioventricular (AV) Node	Lubb, dup
Auscultation	Pulse
AV Bundle	Pulse Pressure
Blood Pressure	Purkinje Fibers
Bundle Branches	Rate
Bundle of His	Rhythm
Cardiovascular Efficiency	Sinoatrial (SA) Node
Cold Pressor	Sphygmomanometer
Diastole	Syncytium
Diastolic Pressure	Systole
General Fatigue Curve	Systolic Pressure
	Tension

Materials Needed

Sphygmomanometer
Stethoscope
Watch (or Clock) with Second Hand
Pan of Ice Water
Compound Microscope
Prepared Slide of Cardiac Muscle

The heart is a four-chambered double pump composed of uninucleate striated cells. The cells of the upper chambers, the atria, contract in unison, as do the cells of the lower chambers, the ventricles. It is this synchronous contraction that allows the cardiac muscle to exert enough pressure to pump blood as needed throughout the body.

