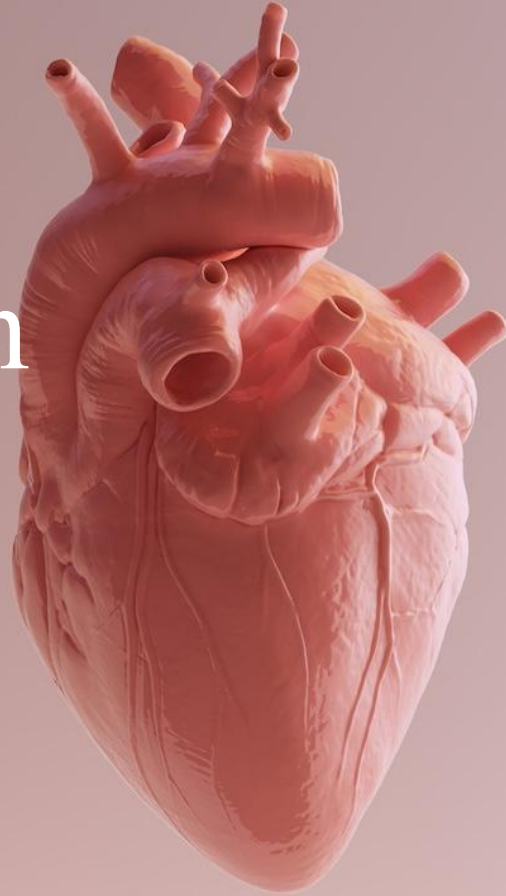


Heart Presentation



PHYS 199

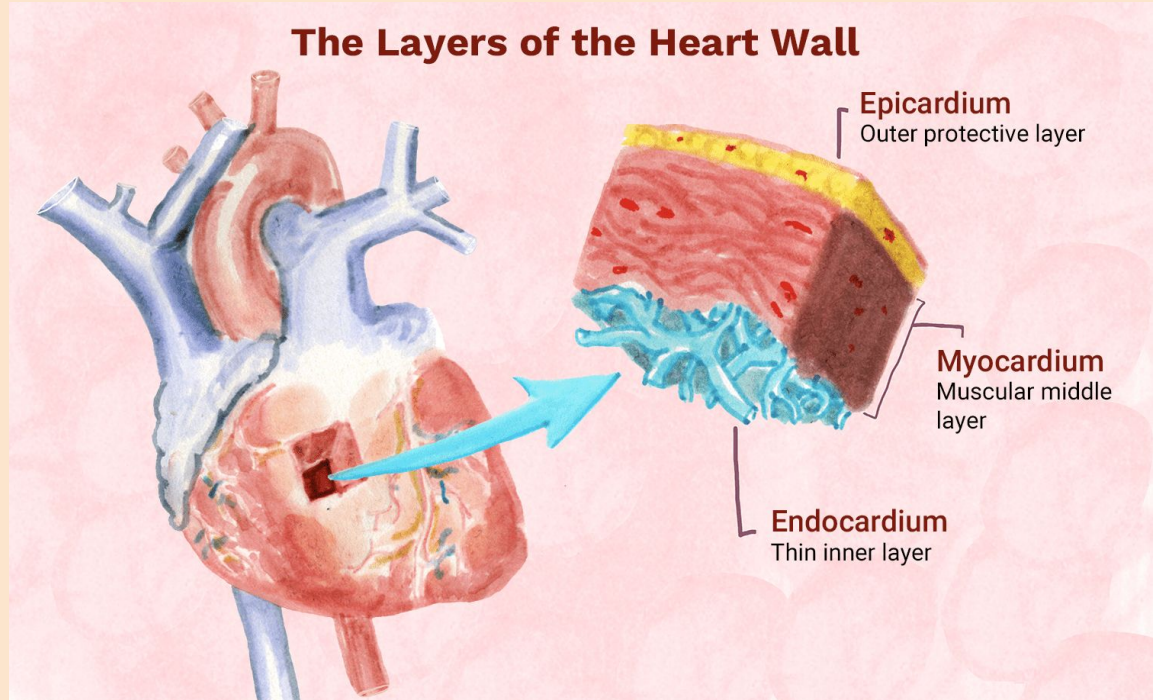
The Heart

- A clenched fist-sized main organ, made of muscles and tissues, located in the center of the chest that pumps blood throughout the whole body
- Provides oxygen and nutrients to all parts of the body
- Electrical Impulses
- The brain and nervous system direct the heart's function



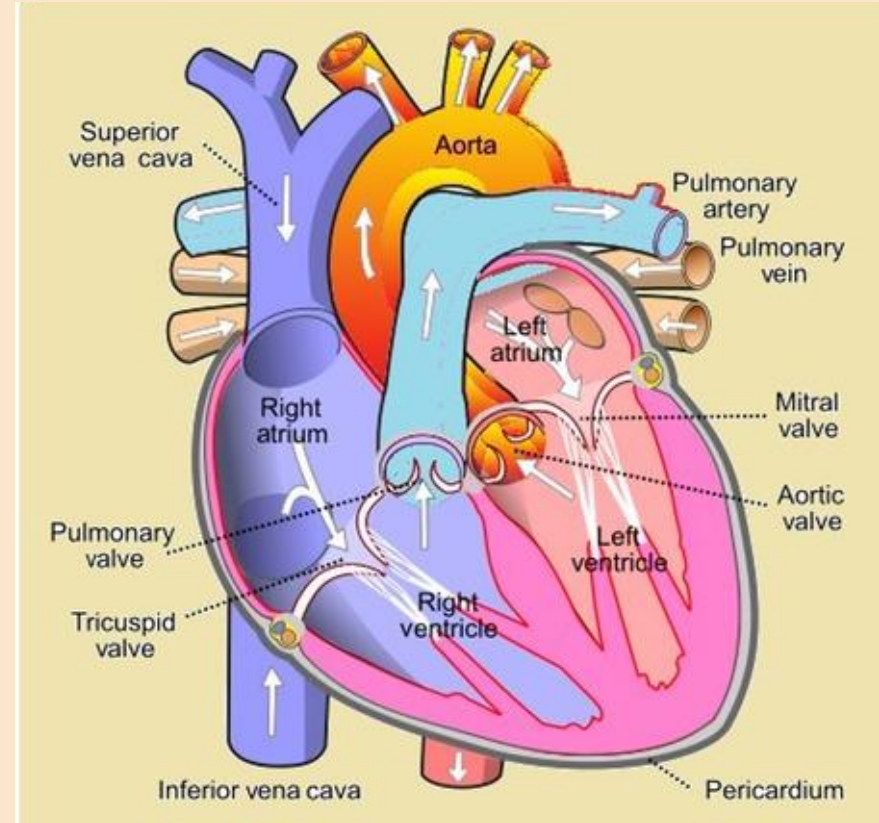
Outer Structure of the Heart

- Composed of three layers
 - Endocardium
 - Myocardium
 - Epicardium



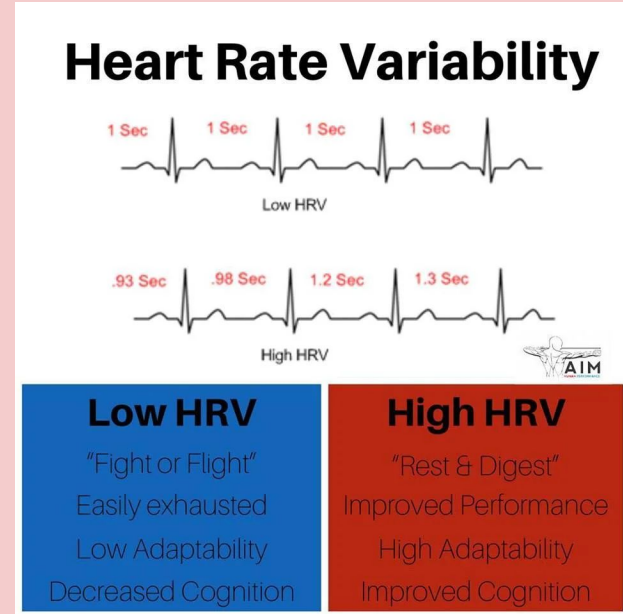
Inner Structure of the Heart

- Divided into four chambers
 - Two atria
 - Two ventricles
- Blood Vessels
 - Coronary arteries
 - Aorta
 - Pulmonary artery
 - Pulmonary veins
 - Vena cava
- Valves
 - Atrioventricular valves
 - Semilunar valves



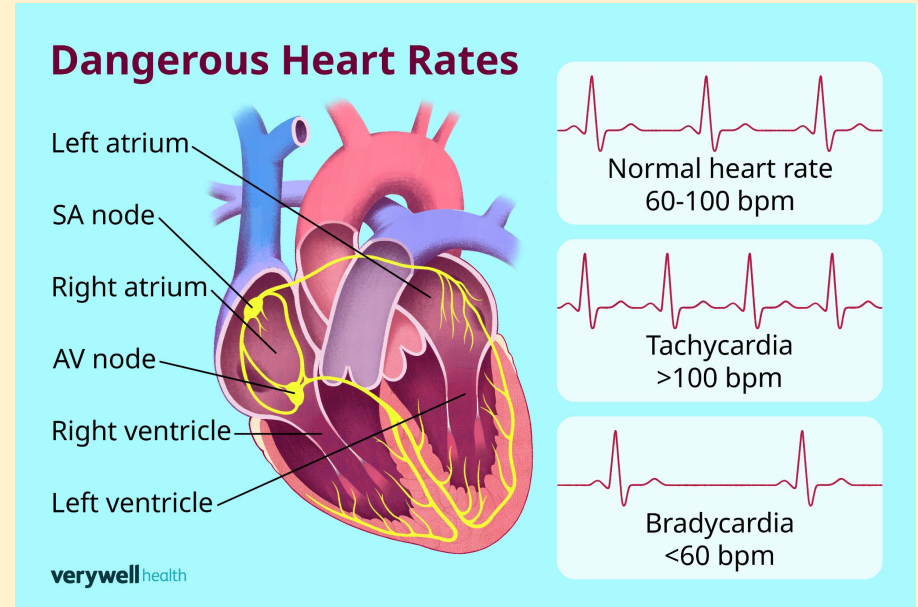
Function of the Heart

- Autonomic Nervous System
 - Sympathetic Nervous System
 - Parasympathetic Nervous System
- The heart can control:
 - Rhythm and speed of the heart rate
 - Maintains the blood pressure
 - Nervous System
 - Endocrine System
- What happens if it stops functioning? The body cannot circulate blood and will eventually fail



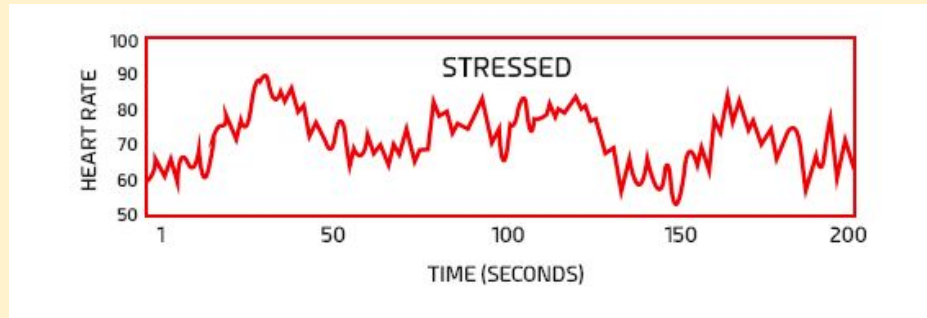
Different heart rates when undergoing different emotions

A normal heart rate falls between 60 - 100 bpm



Different heart rates when undergoing different emotions

Stress



Anxiety



Different heart rates when undergoing different emotions

Joy, Anger, and Sadness

