

Lab 3: The Heart

The Heart pp. 190-197, p.198 questions 6-8, 10-14, 16

Electrocardiogram pp. C49-51

Fetal Pig

-Locate the heart in your pig and identify *left and right atrium, left and right ventricle, superior and inferior vena cava, aorta (aortic arch), ductus arteriosus (arterial duct)*.

-Be sure you can trace the flow of blood in the fetal heart compared to an adult heart (see pg. 174-177 for reference)

-What is the purpose of the arterial duct in fetal pigs/humans?

Pg. 190-194 The Heart (Use your book and the calf heart)

-Be able to identify all the structures of the heart listed in the diagrams using your calf heart.

-Trace the flow of blood from when it enters the heart from the vena cava until it leaves through the aorta.

-Use your probe to explore the heart chambers and how blood enters and leaves the chambers.

-Read and be able to explain how the muscles in the heart execute contractions and how the signal travels within the heart.

-How does a heart attack affect the path of the signal within the heart?

Pg. 195-196 Heartbeat

-Read about methods for determining your heartbeat

-Understand the difference between systolic and diastolic when talking about blood pressure and your heart.

-Measure your *resting* heartbeat using the stethoscope and pulse-rate method

-repeat the pulse-rate method for determining your heartbeat *after* exercising

-What are some other reasons why your heartbeat may increase?

Pg. 196-197 Blood Pressure

-Read about blood pressure and ways for measuring

-Take your blood pressure using cuffs *before* and *after* exercise and then compare your systolic and diastolic readings to normal readings

-Besides exercise, what are some factors that influence your blood pressure?

Pg. C49-51 Electrocardiogram

-Read about the electrocardiogram and how it measures the electrical current in your heart.

-Understand what each type of wave represents and the corresponding letter for the wave.

-We will demonstrate the EKG (ECG) machine on 1 person.

-We now have 3 different ways to look at cardio function- be sure to understand what each method is measuring and what may influence the results.

DON'T FORGET ABOUT THE QUIZ NEXT WEEK!