

Week 7: Nervous System

GE 345 Physiology/Kinesiology

Name

Background

The nervous system controls mainly the quick responses your body makes to stimuli. This is achieved through signals conducted through neurons. These signals are passed between neurons through synapses.

To Do In Class

The effects of the sympathetic nervous system on other organs have been mentioned throughout this term. Remember that heavy sympathetic stimulation increases the body's ability to perform vigorous activity. For this activity, form groups of 4 to 7 members. Based on what you know about the body's other systems, predict how sympathetic stimulation will influence the following factors. You will have 20 minutes to complete as much of this as possible, after which you will be asked to share your answers.

Heart Rate:

Force of Heart Contraction:

Lung bronchi dilation:

GI tract lumen:

GI tract sphincters:

Carbohydrate in the Liver:

Blood glucose:

Blood lipids:

Metabolic Rate:

See Back for Homework Assignment

Due Next Class

Describe/show the structure of a typical synapse and how it works.

Describe the effects of excitatory vs. inhibitory transmitter substance on postsynaptic neurons.

How does the tendon reflex protect muscle fibers from excessive overload?