

What is the primary function of the sympathetic nervous system

- A. To activate the fight or flight response
- B. To regulate digestion
- C. To promote relaxation and rest
- D. To control voluntary movements

Answer: A. To activate the fight or flight response

Where are the cell bodies of sympathetic neurons located

- A. In the parasympathetic ganglia.
- B. In the dorsal root ganglia.
- C. In the brainstem.
- D. In the lateral horns of the spinal cord.

Answer: D. In the lateral horns of the spinal cord.

True or False: The sympathetic nervous system is responsible for the "fight or flight"

- A. Maybe
- B. Not sure
- C. False
- D. True

Answer: D. True

Which neurotransmitter is released by sympathetic neurons at the target organ

- A. Norepinephrine

- B. Serotonin
- C. Dopamine
- D. Acetylcholine

Answer: A. Norepinephrine

What is the main neurotransmitter of the sympathetic nervous system

- A. Norepinephrine
- B. Serotonin
- C. Acetylcholine
- D. Dopamine

Answer: A. Norepinephrine

What is the name of the ganglia where preganglionic sympathetic neurons synapse with postganglionic sympathetic neurons

- A. Hippocampus
- B. Cerebellum
- C. Sympathetic ganglia
- D. Amygdala

Answer: C. Sympathetic ganglia

Which division of the autonomic nervous system is responsible for pupil dilation

- A. Parasympathetic
- B. Somatic
- C. Sympathetic
- D. Central

Answer: C. Sympathetic

True or False: Activation of the sympathetic nervous system leads to increased heart rate.

- A. Maybe
- B. True
- C. False
- D. Not sure

Answer: B. True

What hormone is released by the adrenal medulla in response to sympathetic stimulation?

- A. Melatonin
- B. Insulin
- C. Epinephrine
- D. Cortisol

Answer: C. Epinephrine

What is the term for the process by which sympathetic nerves prepare the body for action?

- A. Rest and Digest
- B. Sleep and Rest
- C. Fight or Flight
- D. Relaxation

Answer: C. Fight or Flight

Which branch of the autonomic nervous system is responsible for "rest and digest"

- A. Parasympathetic
- B. Somatic
- C. Sympathetic
- D. Central

Answer: A. Parasympathetic

What is the name of the receptor that responds to the neurotransmitter released by sympathetic preganglionic neurons

- A. Serotonin receptor
- B. Adrenergic receptor
- C. Dopamine receptor
- D. Acetylcholine receptor

Answer: B. Adrenergic receptor

In which spinal cord segments are the cell bodies of sympathetic preganglionic neurons located

- A. T1-L2
- B. C1-C7
- C. L3-S4
- D. S5-Co1

Answer: A. T1-L2

Which part of the brain is responsible for coordinating sympathetic responses

- A. Brainstem

- B. Hypothalamus
- C. Frontal lobe
- D. Cerebellum

Answer: B. Hypothalamus

True or False: Activation of the sympathetic nervous system increases blood flow to the digestive system

- A. Yes
- B. No
- C. False
- D. True

Answer: C. False

What is the term for the involuntary response of the body to a stressor

- A. Stress reaction
- B. Fight or flight response
- C. Fight response
- D. Flight response

Answer: B. Fight or flight response

What effect does the sympathetic nervous system have on the bronchioles in the lungs

- A. Dilation
- B. No effect
- C. Constriction
- D. Relaxation

Answer: A. Dilation

What is the name of the nerve that carries sympathetic signals to the heart

- A. Cardiac accelerator nerve
- B. Femoral nerve
- C. Sciatic nerve
- D. Vagus nerve

Answer: A. Cardiac accelerator nerve

True or False: Activation of the sympathetic nervous system leads to increased sweating

- A. False
- B. True
- C. Not sure
- D. Maybe

Answer: B. True

What is the term for the communication pathway between sympathetic neurons and target organs

- A. nervous system
- B. sympathetic pathway
- C. target pathway
- D. endocrine system

Answer: B. sympathetic pathway

