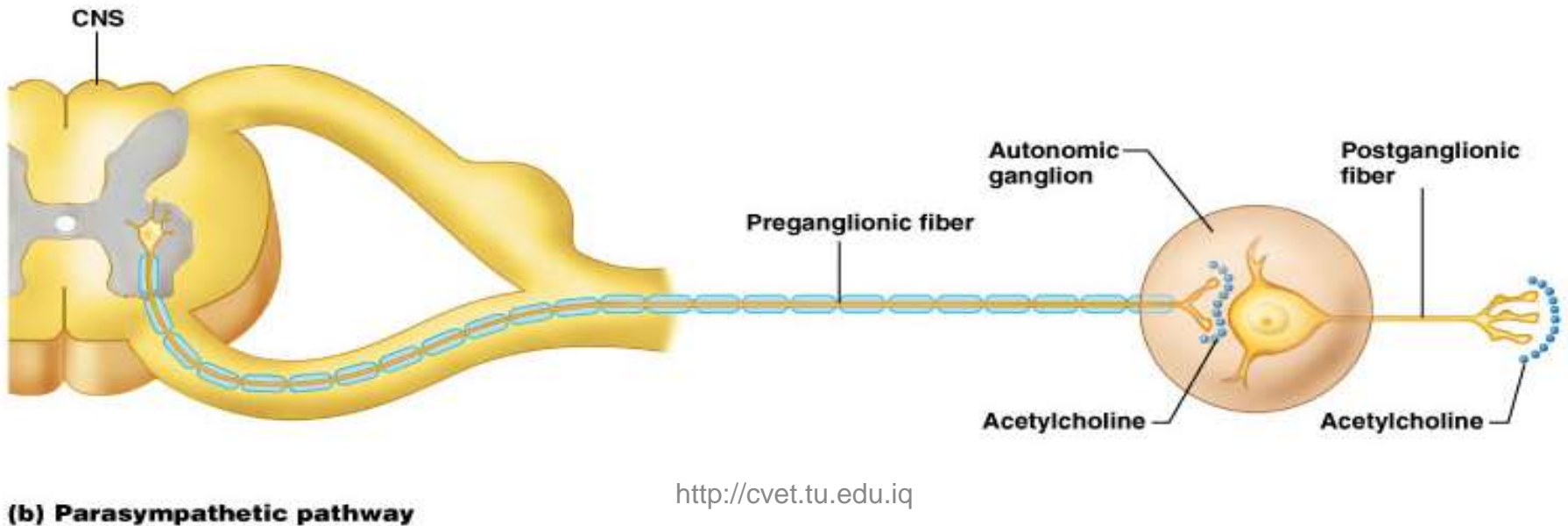
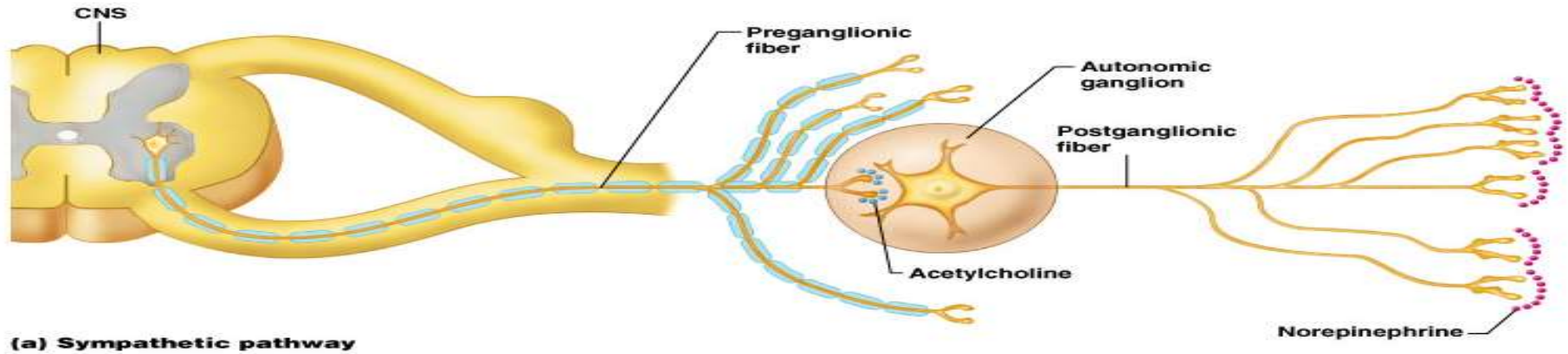


# The Autonomic Nervous System

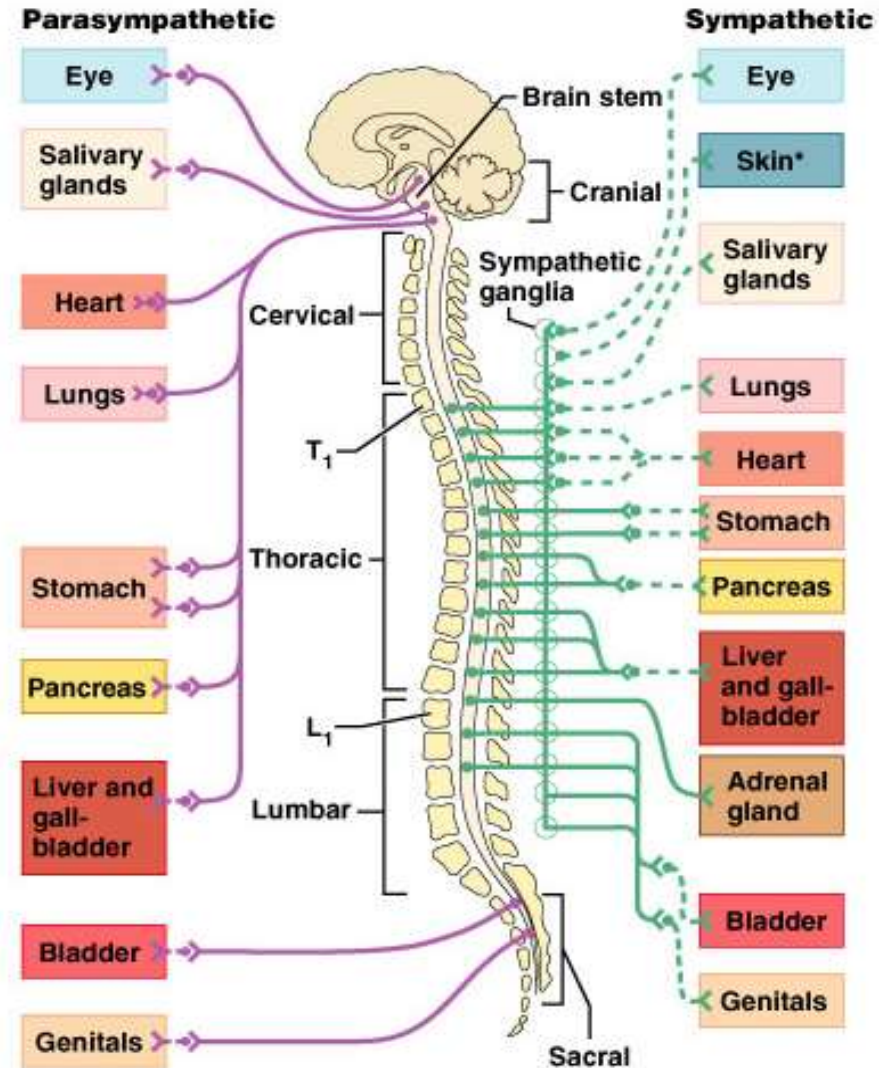
- The autonomic nervous system (ANS) regulates physiologic processes. Regulation occurs without conscious control, ie, autonomously. The 2 major divisions are the
  - Sympathetic system
  - Parasympathetic system

# Anatomical Differences between Sympathetic and Parasympathetic Divisions



# Anatomical Differences in Sympathetic and Parasympathetic Divisions

- Issue from different regions of the CNS
  - Sympathetic – also called the thoracolumbar division
  - Parasympathetic – also called the craniosacral division



# Differences in Sympathetic and Parasympathetic Divisions

Parasympathetic	Sympathetic
called the craniosacral division	called the thoracolumbar division
short postganglionic fibers (near the target organ ) / long preganglionic fiber	long postganglionic fibers/ short preganglionic fiber
Parasympathetic axons – few branches Localized effect	Sympathetic axons – highly branched Influences many organs
Neurotransmitters of Parasympathetic – acetylcholine therefore called (cholinergic)	Neurotransmitters of Sympathetic – most release norepinephrine in the postganglionic fiber therefore called (adrenergic) except in sweat gland it release acetylcholine and in all preganglionic (cholinergic)
Rest-and-digest response ( inhibition )	fight-or-flight ( activation )

