ANS vs Somatic

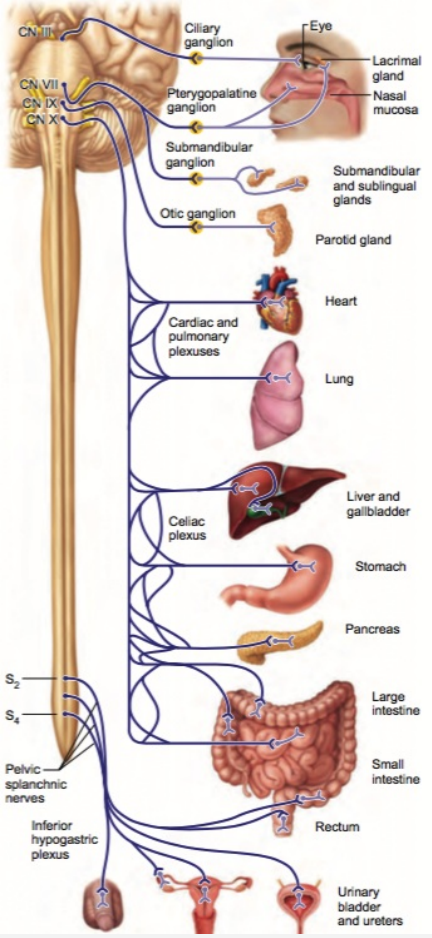
Factor	Autonomic	Somatic
Effectors	Smooth muscle and glands	Skeletal Muscle
Efferent Pathways	Two neuron chain with ganglia	Single Neuron
NT Effects	PS: ACh / S: NE (can be inhibitory or stimulatory)	ACh (only stimulatory)

Sympathetic Vs Parasympathetic

Factor	Parasympathetic	Sympathetic
Origin Site	Brain & Spinal Cord	Thoracolumbar
Pre/Post Fiber Length	Long/Short	Short/Long
Ganglia Location	In Visceral Effector Organs	Close to Spinal Cord

Receptors in ANS

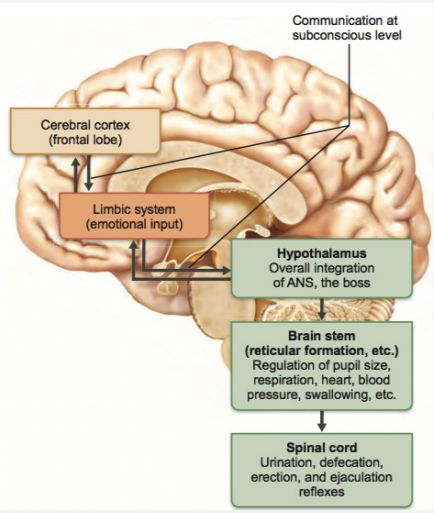
Parasympathetic (Craniosacral)



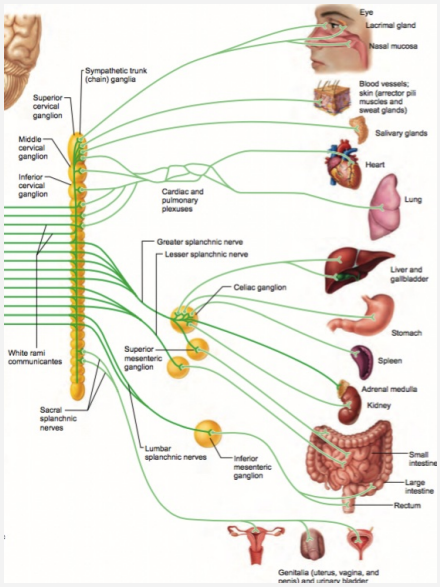
Cranial Outflow Functions

[III]	Constrict Pupils; Bulge Lenses
[VII]	Nasal + Lacrimal Glands -or- Sublingual + Submandibular
[IX]	Activate Parotid Salivary Glands

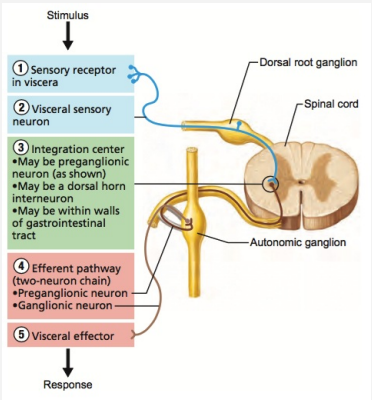
Levels of ANS Control



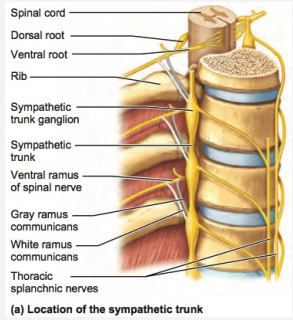
Sympathetic Outflow



Visceral Reflex Arc



Sympathetic Chains



Type	Location	Effect on Binding
Nicotinic (ACh)	All Gang. Neurons; Adrenal Medullary Cells; NMJ	Ex.
Muscarinic (ACh)	All Para targets (symp. eccrine sweat glands and blood vessels in skel musc.)	Ex (xcept heart); Activation
B1 (NE/E)	HEART + kidneys + adipose tissue	HR/FORCE; RENIN
B2 (NE/E)	Lungs, Symp Tissue, BV (heart, liver, skel m.)	Mostly Inhibitory
B3 (NE/E)	Adipocytes	LIPOLYSIS
A1	BV in viscera, skin, mucosa; All Sym. targets except heart	BV CONSTRICT; pupils dilate
A2	Adrenergic axon term.; Pancreas; Platelets	Inh. NE + insulin release; Up Clotting

By **tbrennan101**

cheatography.com/tbrennan101/

Published 28th April, 2016.
Last updated 12th May, 2016.
Page 1 of 2.

Sponsored by **Readable.com**
Measure your website readability!
https://readable.com