

LARGE INTESTINE NERVE SUPPLY

1. AUTONOMIC INNERVATION OVERVIEW

Region	Parasympathetic (Rest/Digest)	Sympathetic (Fight/Flight)
Cecum & Ascending Colon	Vagus Nerve (CN X)	Superior Mesenteric Plexus (T10-T12)
Transverse Colon (Proximal 2/3)	Vagus Nerve (CN X)	Superior Mesenteric Plexus
Transverse Colon (Distal 1/3)	Pelvic Splanchnic Nerves (S2-S4)	Inferior Mesenteric Plexus (L1-L2)
Descending & Sigmoid Colon	Pelvic Splanchnic Nerves (S2-S4)	Inferior Mesenteric Plexus (L1-L2)
Rectum & Anal Canal (Upper)	Pelvic Splanchnic Nerves (S2-S4)	Hypogastric Plexuses

2. SENSORY INNERVATION

Visceral Afferents Follow sympathetic fibers (T10-L2) for pain; Follow parasympathetic fibers for reflex functions.

3. SOMATIC INNERVATION

External Anal Sphincter Inferior Rectal Nerve (branch of Pudendal Nerve, S2-S4)

4. INTRINSIC SUPPLY (ENTERIC NERVOUS SYSTEM)

- **Myenteric (Auerbach's) Plexus:** Located between muscle layers; controls motility.
- **Submucosal (Meissner's) Plexus:** Located in submucosa; controls secretion and blood flow.

Note: The transition of parasympathetic supply from the Vagus Nerve to the Pelvic Splanchnic Nerves occurs at the Left Colic (Splenic) Flexure.