

OVERVIEW

CN: When coloring the organs that overlap each other, use your lightest colors for D, E, T, V, and W. Each overlapping portion receives the color of both structures. (1) After coloring the alimentary canal, review the structures before completing the accessory organs. The central section of the transverse colon (J) has been removed to show deeper structures.

ALIMENTARY CANAL

- ORAL CAVITY^A
- PHARYNX^B
- ESOPHAGUS^C
- STOMACH^D
- SMALL INTESTINE⁺
 - DUODENUM^E
 - JEJUNUM^F
 - ILEUM^G
- LARGE INTESTINE⁺
 - CECUM^H
 - VERMIFORM APPENDIX^{H'}
 - COLON⁺
 - ASCENDING COLON^I
 - TRANSVERSE COLON^J
 - DESCENDING COLON^K
 - SIGMOID COLON^L
 - RECTUM^M
 - ANAL CANAL^N

ACCESSORY ORGANS

- TEETH[.]
- TONGUE⁻
- SALIVARY GLANDS⁺
 - SUBLINGUAL[.]
 - SUBMANDIBULAR^R
 - PAROTID^S
- LIVER^T
- GALL BLADDER^U
- BILE DUCT^V
- PANCREAS^W

The digestive system consists of an alimentary canal with accessory organs. The canal begins with the *oral cavity*. Here the *teeth* pulverize ingested food while it is softened and partly digested by *salivary gland* secretions. The *tongue* aids in mechanical manipulation of the food and literally flips the food into the fibromuscular *pharynx* during swallowing.

The esophagus moves the bolus along to the *stomach* by peristaltic muscular contractions. Here the bolus is treated to mechanical and chemical digestion, then passed into the highly coiled *small intestine* for more enzymatic and mechanical digestive processes. Bile, produced by the *liver* and stored in the *gall bladder*, is discharged into the *duodenum* by a *bile duct*. Bile assists in the breakdown of fats. Digestive enzymes from the *pancreas* enter the duodenum as well. Nutrients of molecular size are extracted primarily from the lumen of the small intestine, absorbed by lining cells, and transferred to blood and lymph capillaries for eventual delivery to the liver for processing. The large intestine is concerned with absorption of minerals and water (proximal half) and storage. Undigested, unabsorbed material continues to the rectum for discharge through the anal canal and anus.

