Thecodont	Base of tooth in the socket of bone
Diphyodont	Two successive sets of teeth
Heterodont	Different types of teeth Incisors, canine, premolars and molars Dental formula $\frac{2123}{2123}$

Tongue	Attached to oral cavity by frenulum Papillae- small projections, some have taste buds
Epiglottis	Cartilaginous flap, which prevents food from entering glottis
Pyloric sphincter	Guards opening of stomach into duodenum

Caecum	Hosts symbiotic microorganisms Vermiform appendix arise fro caecum
Serosa	Outermost layer of alimentary canal Thin mesothelium and some connective tissues
Muscularis	Comes after serosa Inner circular and outer longitudinal Made up of smooth muscles

Submucosa	Made up of loose connective tissues Contains nerves, blood and lymph vessels Brunner's glands in duodenum are present in sub-mucosa
Mucosa	The innermost wall of alimentary canal, lines the lumen Forms irregular folds rugae in stomach Goblet cells- secrete mucus Contains gastric glands
Villi	Finger-like foldings in the intestine and increase absorption surface Supplied by blood capillaries and a large lymph vessel called lacteals

Salivary Glands	Parotid- cheek Submaxillary/ submandibular- lower jaw Sublingual- below tongue
Salivary amylase	Source- salivary glands Function- carbohydrate digestion starts here Starch (30%) is converted to disaccharide, maltose. Optimum pH 6.8
Lysozyme	Source- saliva Function- antibacterial and protects from infection

Pepsin	Source- Peptic or chief cells of stomach as proenzyme pepsinogen Function- Proteolytic, converts proteins to peptides
HCl	Source- Parietal or oxyntic cells Function- converts pepsinogen to pepsin and provides acidic pH (1.8) for action of pepsin
Rennin	Source- chief cells of infants as prorennin Function- digestion of milk protein casein

Intrinsic factor	Source- Parietal or oxyntic cells Function- Absorption of vitamin B_{12}
Enterokinase	Source- Intestinal mucosa Function- converts trypsinogen to active enzyme trypsin
Bile	Source- Produced by liver, stored in gallbladder and released into duodenum by hepatopancreatic duct Contains- Bilirubin, biliverdin, cholesterol, phospholipids, bile salts, no enzymes Function- Emulsification of fats and activation of pancreatic lipases

Brunner's glands	Present in- Submucosal layer of duodenum Function- Protects intestinal mucosa from acid content of chyme and provides alkaline medium for enzyme activity (pH=7.8)
Chyme	Semifluid acidic mass of partly digested food which enters duodenum from stomach
Secretin	Source- A hormone secreted by S-cells of duodenum (enteroendocrine cells) Function- Stimulates secretion of pancreatic bicarbonate, regulation of gastric acid secretion and osmoregulation

Cholecystokinin	Source- Secreted in duodenum by I cells Function- Stimulates gallbladder to secrete bile juice and stimulates enzyme production by pancreas
Sphincter of Oddi	Guards the opening of the hepatopancreatic duct into duodenum
Goblet cells	Present in- the intestinal mucosal epithelium Secrete- mucus containing a glycosylated protein called mucin Function- Lubrication and protection of the intestinal mucosa from acid

Trypsin	Source- Pancreas as a proenzyme trypsinogen Function- Activates other proenzymes of pancreatic juice and proteolytic enzyme
Chymotrypsin	Source- Pancreas as a proenzyme chymotrypsinogen Function- proteolytic enzyme, converts polypeptides to dipeptides
Crypts of Lieberkuhn	Crypts at the bases of villi in the mucosa layer of the intestine

Carboxypeptidase	Source- Pancreas as a proenzyme procarboxypeptidase Function- Protease enzyme, hydrolyses carboxy-terminal of a protein or peptide
Pancreatic amylase	Source- Pancreas Function- Polysaccharide into a disaccharide
Pancreatic lipases	Source- Pancreas Function- Digestion of fats to di and monoglycerides

Nucleases	Source- Pancreas Function- Converts nucleic acids to nucleotides and nucleosides
Succus entericus	Intestinal juice (alkaline) Secreted by- glands of intestinal wall (goblet cells, brush-border epithelium) Contains- Mucus, Enzymes- enterokinase, dipeptidases, nucleosidases, lipases, disaccharidases (maltase, lactase, etc.)
Gastric lipases	Source- Peptic cells or chief cells of stomach Function- small amount ~1% of emulsified fat in the food is digested to fatty acid and glycerol

Dipeptidase	Source- Small intestine Function- Dipeptides to amino acids
Maltase	Source- Small intestine Function- Maltose to glucose
Sucrase	Source- Small intestine Function- Sucrose to glucose and fructose

Lactase	Source- Small intestine Function- Lactose to glucose and galactose
Nucleotidases	Source- Small intestine Function- Nucleotides to nucleosides
Nucleosidases	Source- Small intestine Function- Nucleosides to sugar and bases

Lipases	Source- Small intestine Function- Mono and diglycerides to fatty acids and glycerol
Physiologic Calorific value	Fats- 9 kcal/g Carbohydrates- 4 kcal/g Proteins- 4 kcal/g