GIT PHYSIOLOGY MCQ answers

1. The actions of cholecystokinin include:

A: blocks the action of secretin
B: reduction in intestinal motility
C: relaxation of the sphincter of Oddi ✓
D: stimulation of small intestinal I cells

2. Elevated acid levels in the gastric antrum lead to

A: enhanced gastrin secretion
B: increased gastric emptying
C: pernicious anaemia
D: release of somatostatin ✓

3: Gastrin secretion is not affected by

A: gastric contents
B: hormonal factors
C: pancreatic insufficiency ✓
D: vagal tone

4. Bile acids are important in achieving

A: absorption of vitamin D
B: emulsification of ingested fat ✓
C: excretion of heme breakdown products
D: pH balance in the duodenum

5. The action of secretin induces

A: acinar release of zymogen granules
B: bicarbonate secretion from the pancreas ✓
C: relaxation of the gallbladder smooth muscle
D: vagally mediated reflex secretion from the pancreas

6. Dr Gonzalo has eaten a perfectly barbecued portion of beef. The digestive enzyme most involved in this feast will be

A: amylase (salivary and pancreatic)
B: colipase
C: phospholipase A
D: trypsin ✓

7: Mabel the cavoodle can smell something cooking. Assuming she has humanoid physiology, the cephalic phase of gastric secretion depends on

A: histamine release
B: inhibition of the dorsal vagal centres
C: release of gastrin-releasing peptide ✓
D: salivary amylase secretion

8. Regarding fluid balance within the gastrointestinal tract:

A: bile excretion accounts for 1000 mL of water daily
B: maximum water reabsorption occurs in the colon
C: pancreatic secretions should be less than 250 mL per day
D: the stomach secretes more water than the intestine ✓

9. The myenteric plexus

A: controls glandular secretions
B: has both parasympathetic and sympathetic connections ✓
C: lies outside the outer longitudinal muscle layer
D: uses a single neurotransmitter

10. The portal venous circulation receives

A: all of the blood from the superior & inferior mesenteric arteries ✓
B: 500mL/minute via the hepatic artery
C: more flow in the fasting state
D: two thirds of the cardiac output