Chapter 3 - Digestion, Absorption and Transport

Across
4. Manufactures enzymes to digest all energy yielding nutrients and releases bicarbonate to neutralise acid chime that enters the small intestine.
7. A chemical reaction in which a major reactant is split into two products, with the addition of a hydrogen atom (H) to one and a hydroxyl group (OH) to the other (from water).
8. When it receives the signal that fat is present in the duodenum, the ______ contracts and squirts bile through the bile duct into the duodenum.
10. Living micro organisms found in foods that, when consumed in sufficient quantities, are beneficial to health.
12. A substance with both water-soluble and fat-soluble

Down
1. A clear yellowish fluid that is similar to blood except that it contains no red blood cells or platelets.
2. A lesion of the skin or mucous membranes characterised by inflammation and damaged tissues.
3. ______ diffusion is when nutrients (e.g. water-soluble vitamins) require a specific carrier to transport them from one side of the cell membrane to the other.
5. An emulsifier that prepares fats and oils for digestion; an exocrine secretion made by the liver.
6. A hormone produced by cells of the intestinal wall. Target organ: the gallbladder. Response: release of bile and slowing of GI motility. Also signals the pancreas to secrete its juices,
portions that promotes the mixing of oils and fats in a watery solution.

14. Wavelike muscular contractions of the GI tract that push its contents along.

17. ________ intestine reabsorbs water and minerals; passes waste (fibre, bacteria and unabsorbed nutrients) along with water to the rectum.


20. Fingerlike projections from the folds of the small intestine.

releasing bicarbonate and enzymes into the small intestine.


11. Secreted from the pancreas as part of the pancreatic juice, an alkaline compound with the formula HCO3.

13. ________ intestine secretes enzymes that digest all energy-yielding nutrients to smaller nutrient particles; cells of wall absorb nutrients into blood and lymph.

15. ________ diffusion is how nutrients such as water and small lipids cross into intestinal cells freely.

16. The semiliquid mass of partly digested food expelled by the stomach into the duodenum.

19. ________ transport requires energy to move nutrients against a concentration gradient.