Treatment of food in the alimentary canal

Treatment of Food in the Alimentary Canal* Holozoic nutrition- The intake of food and the processes that convert food substances into living matter is known as nutrition.

Feeding in man includes: 1. Ingestion ??“ taking in of food through the mouth. 2. Digestion ??“ the process whereby large food molecules are broken down into soluble and diffusible molecules that can be absorbed into the body cells. 3. Absorption ??“ the process whereby digested food materials are taken into the body cells.

4. Assimilation ??“ the process whereby some of the absorbed food materials are converted into new protoplasm or used to provide energy. 5. Egestion ??“ the process of removing the undigested materials left behind in the alimentary canal.- Animals feed by ingesting ready-made complex organic matter (solid/liquid) obtained from other organisms. This mode of feeding on ready-made organic matter is known as holozoic nutrition.

* The Alimentary Canal- The basic components of the alimentary canal: gut and glands.- The gut extends from the mouth to the anus, with most of its length coiled in the abdominal cavity. The parts of the gut are as follows: mouth and buccal cavity, pharynx, oesophagus, stomach, small intestine, large intestine and anus.- Gland ??“ is a cell, a tissue, or an organ that secretes a chemical substance.* Ingestion & Digestion- The Mouth and the Buccal Cavity Food enters the body via the mouth which leads into the buccal cavity. In the mouth, the solid food is broken up into small pieces by the chewing action of the teeth. The tongue has special sense cells or taste

buds which help you select suitable foods. Three pairs of salivary glands open into the buccal cavity via ducts.

They produce a secretion called saliva which emptied into the buccal cavity.* Buccal cavity- Saliva is a slightly alkaline digestive juice which consists of water, mucus and an enzyme called salivary amylase. a) Water ??“ moisten and softens the food while chewing help the food to break down into smaller pieces. b) Mucus ??“ lubricates the food so that it can be swallowed easily. c) Salivary amylase ??“ catalyses the breakdown of starch & glycogen > maltose.* Dentition A. Structure of teeth ??“ it is divided into 3 regions: 1.) Crown ??“ part which projects the gum.

2.) Root ??“ embedded/implanted in the jaw bone by a cement layer and flexible ligaments. 3.) Neck ??“ the narrow region between the crown and the root which is bounded by the gum. It is where the tooth joins the gums.