

Guided Notes - Digestive System *The rest of these guided notes are found on Weebly under " Current Assignments". Print them for your use.*

2 Major Parts

- 1) _____ (consists of mouth/oralcavity, pharynx, esophagus, stomach, lrg & sml intestine, anus).
- 2) _____ Aid in digestive process.

General facts:

1. Total Length - _____
2. _____ canal - *refers to nourishing.*
3. If cut open & *spread out...*

Main Functions

- 1.
- 2.
- 3.
- 4.
- 5.

Histology

1. _____ layer. Lined with epithelium tissue.
_____, _____, _____.
2. _____ . *Loose connective tissue.* Houses....
3. _____ layer. Inner layer of muscle is _____ ;
outer layer is _____.
4. _____ - _____ layer. Secretes _____ fluid.
Serous Fluid is thin & runny, keeps organs from _____ to one another.

Checks & Tongue

_____ form side walls & _____ sense temp & texture.

Tongue - A thick, _____ organ.

Attaches to floor of mouth by bit of skin called the _____

_____ - Rough _____ on tongue, provide
_____ & help move food around in mouth.

2 Basic Activities:

1. *Chewing* is physiologically called _____
2. and _____ a process that uses smooth muscles in a rhythmic motion

ORAL CAVITY (MOUTH)

2 main Functions

- 1.
- 2.

2 Ways of Moving Food:

1. _____ or swallowing.
2. _____. Wave-like motion the moves food along.
3. **Propulsion** of food down the alimentary canal in the form of:
 - a)
 - b)

Vestibule -

The Art of Swallowing (deglutition) in 3 Steps:

1. **Voluntary** - _____ of food moved by _____ from oral cavity
to _____.
2. **Pharyngeal** - Acting in reflex, the _____
relaxes, _____ raises to block the nasal cavity.

The elevated _____ opens the _____ & the food is pushed down.

3. **Esophageal** - The _____ is tipped posteriorly, the _____ is elevated to prevent food from going down "the wrong way".

I. PALATE - Forms _____ of oral cavity.

Anterior = _____; Posterior = _____

_____ & _____ help close off nasal cavity when _____.

Tonsils - Palatine ("tonsils"); Pharyngeal ("adenoids"); Lingual

II. TEETH

A. Two sets develop in the _____ of the maxillary & mandibular bones.

1. _____ (a.k.a. *baby, deciduous or milk*) Teeth.
2. Erupt from gums @ anywhere from _____ mos. - _____ yrs.
3. Shed in _____ as they appear.
4. Alveolar Arch - the 'arch' formed by the shape of the teeth in the jaw
5. 32 _____ (_____) teeth.

Erupt from ages _____ - _____ but can go up to _____.

Different teeth have different roles in mechanical digestion of food.

B. Types of Teeth

- 1.
- 2.
- 3.
- 4.

3rd Molar (_____) May fail to erupt " _____ "

C. Tooth Anatomy

Covering of _____ hardest structure in the human body!

_____ if damaged.

2 main portions - _____ (above gumline) & _____ (anchors tooth)

Bulk of tooth is composed of _____ which is harder even than bone.

Dentin surrounds _____ which contains _____,

_____, & _____. They reach through the Root Canal.

Gingivitis & Cavities...

III. SALIVARY GLANDS

Major Functions:

- 1.
- 2.
- 3.

Saliva Produced from:

_____ Cells: Produce _____ (which is thick & lubricates food).

_____ Cells: Prod. thinner mucus. Contains the enzyme _____ which breaks down starches.

3 Types of Salivary Glands:

- 1.
- 2.
- 3.

IV. PHARYNX

Connects _____ & _____ cavities with _____ & _____

Composed of 3 Parts:

- 1.
- 2.
- 3.

V. ESOPHAGUS

-Straight, collapsible _____ leading to the stomach.

-Passes thru _____ of _____.

-2 *Sphincters* at each end of Esophagus:

- 1) _____ (relaxes for passage of food) &
- 2) _____ (helps prevent regurgitation of food.)

VI. STOMACH

Location -

Capacity _____; Weight _____;

Length & Shape:

Receives _____, mixes with _____, begins breakdown of

Actually has limited absorption (except for

Regions - Cardiac -

Fundus (-ic)

Body-

Pylorus (-ic)

Ends in _____.

Layers of Stomach Wall are same as the rest of the alimentary canal

5. Rugae - Appear as _____ in the stomach when empty.

6. Mucosa Layer is studded with small pits called _____.

Located at the end of the _____.

3 Types of Secretory cells:

1. _____ - near opening of gastric pit.. Secrete mucous

2. _____ - secretes HCl & intrinsic factor (for Vit. B-12)

3. _____ - secretes digestive enzymes.

Components of Gastric Juice:

_____ - Most important stomach enzyme.

Secreted by _____ cells as _____.

When this comes in contact with Stomach _____ converts into _____.

Regulation of gastric secretions

When you see, taste or smell food , _____ nerve impulses

_____ release _____.

ACH stimulates the release of _____

As food moves into intestines, it triggers the release of _____ which _____
_____ as intestine fills.

Random stomach stuff:

XII. Pancreas

A. Closely assoc. with _____

B. As an endocrine gland -

C. Has exocrine function too. Secretes

D. Pancreatic _____ breaks down _____.

pancreatic _____ breaks down _____

Trypsin, chymotrypsin, & carboxypeptidase break down _____.

Release of pancreatic juice is dependent on _____ & _____.

XIII. Liver

Location:

Weight:

Lobes:

Ducts:

Functions:

1. Salts emulsify fats - bilirubin pigment
2. Glycogen, fat, iron
- 3.
4. Remove ammonia, convert to urea
5. Phagocytize red & white blood cells
6. albumins, fibrinogens, globulins, heparin, clotting

Other notes: