Oral cavity, Anatomy and Histology Part II
The Tongue and Tonsil
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Digastric muscle
The human tongue

- papillae
- roof of mouth
- tongue
- base
- food and air passage
- teeth
- lips
- lower jawbone
- root
Fimbriated fold (plica fimbriata)
Lingual frenulum
Lingual vein
Sublingual gland (under the mucosa)
Submandibular duct (opening)
HYOGLOSSUS & ITS RELATIONS

- Stylohyoid ligament
- Glossopharyngeal nerve (IX)
- Lingual artery
- Lingual nerve with submandibular ganglion hanging from it
- Submandibular duct
- Venae comitantes of XII (veins from tongue)
- Hypoglossal nerve (XII)

HYOGLOSSUS

POSTERIOR

Hyoid bone

ANTERIOR
Blood supply of the tongue
Lingual artery, deep and dorsal branches
Lingual vein, deep and dorsal tributaries
Nerve supply of the tongue

- Palatoglossus (vagus nerve, CN X)
- Internal laryngeal nerve, CN X
- Glossopharyngeal nerve, CN IX (general and special sense)
- Overlapping nerve supply
  - Lingual nerve, CN V₃ (general sensory)
  - Chorda tympani, CN VII (special sensory)

**Motor Nerves**

**Sensory Nerves**
Lymphatic drainage of the tongue

- Submental nodes
- Submandibular nodes
- Infrahypoid node
- Prelaryngeal node
- Pretracheal node
- Anterior cervical node (in suprasternal space)
- Jugulodigastric node
- Upper deep cervical nodes
- Jugulo-omohyoid node
- Lower deep cervical nodes
Structure of the tongue

Mucosa
• *stratified squamous* epithelium on both surfaces.
• The dorsal surface forms *papillae*

Submucosa
• Has *minor salivary* glands that secrete both mucous and serous secretions.

Muscles
• Core of *skeletal striated* muscles running in all directions
Foliate papillae are uncommon in The human being
Each consists of a connective tissue core covered by stratified squamous epithelium.
Lingual Papillae

Filiform papillae (Cone-shaped)
- Most numerous; all over the tongue.
- No taste buds

Fungiform papillae (Mushroom shaped)
- Less numerous; present on tip and sides of the tongue
- Has taste buds

Fig. 5 Filiform papillae: Slideshare.com 2016
Lingual Papillae

Circumvallate papillae (surrounded by a wall, vall=wall)
8 - 12 papillae located just anterior to the sulcus terminalis.
- Large circular papillae, each is surrounded by a deep groove
- Has taste buds.

Fig. 6 Circumvallate papillae: Slideshare.com 2016
Palatine tonsil

Hard palate

Soft palate

Uvula

Palatoglossal arch

Tonsil

Tongue