### Oral Cavity

**Structure?**
- Skeleton: Maxillae, palatine b’s, mandible, hyoid b, temporal b’s, sphenoid
- Roof: Hard & soft palates
- Floor: Soft tissues [muscular diaphragm from mylohyoid muscle & tongue]
- Lateral walls [cheeks]: Muscular & merge anteriorly with the lips

**Openings?**
- To face [anterior]: Oral fissure
- To pharynx [posterior]: Oropharyngeal isthmus

**Regions?**
- Oral vestibule: Horseshoe-shaped, between dental arches & surface of lips/cheeks [opened/closed by muscles of facial expression]
- Oral cavity proper: Enclosed by the dental arches

**Movements?**
- Jaws: Degree of separation of upper & lower arches established by elevating or depressing the mandible at the TMJ [see separate notes]
- Openings: Oropharyngeal isthmus can be opened & closed by surrounding soft tissues [incl. soft palate & tongue].

**Function?**
- Digestion: Inlet for the digestive system, allows initial processing of food aided by salivary gland secretion
- Mastication: Biting & chewing
- Phonation: Manipulates sound produced by the larynx
- Respiration: Inlet for air, breath in - comes into the pharynx

**Innervation?**
- Terminal nerve plexus: Manently - sensory
- Upper: Palate & Maxillary teeth – branches of maxillary n V2
- Lower: Mandibular teeth & oral parts of tongue – branches of mandibular n V3
- Taste (special afferent SA) = Ant 2/3 tongue – branches of facial n VII [shorda tympani] which join & are distributed by trigeminal n V
- Parasympathetic fibres to glands within oral cavity – branches of facial n VII distributed by trigeminal n V
- Sympathetic fibres in oral cavity – from spinal cord T1 distributed by trigeminal n V
- Muscles of tongue: all by hypoglossal n XII except palatoglossus – vagus n X
- Muscles of soft palate: all by vagus n X except tensor veli palatini – mandibular n V3 which also innervates the mylohyoid m

**Palatoglossal arch:** Posterior limit of oral cavity

**Rubber dams:** Used to prevent debris passing to oropharyngeal isthmus & pharynx into esophagus or lower airway
**Dentition**

**Number**
- Adult: 32 teeth
- Child: 20 deciduous teeth

**Grouping**
- Quadrants: Adult
  - UR = 1
  - UL = 2
  - LR = 4
  - LL = 3
- Child
  - UR = 5
  - UL = 6
  - LR = 8
  - LL = 7

**Charting**
- Adult: 1 to 8 in each quadrant (1 central incisor – 8 3rd molar)
- Child: 1 to 5 in each quadrant (no premolars or 3rd molar)
- FDI: Uses quadrant & tooth number e.g. adult UR central incisor = 11

**Occlusion**
- Manner in which upper and lower teeth come together in closed mouth

**Foundation**
- Attached to sockets [alveoli] in arches of maxillae and mandible

**Clinical Relevance**
- Extraction: If teeth are removed, the alveolar bone is resorbed and the arches disappear
- Supernumerary teeth: Additional teeth to normal
- Microdontia: Teeth appear smaller than normal
- Periodontitis: Gum disease
- Dental malocclusion: Biting surfaces of teeth do not fit together optimally – can cause facial & oral pain, biting, gum health, speech development, and good OH

**Development**
- Influenced by number of factors, such as heredity & shape of jaw
- Issues include failure to develop, adult retention of deciduous teeth, impaction (failure to erupt)