## The deciduous teeth



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Deciduous teeth are that teeth which function during childhood and then they are shed and replaced by permanent teeth. The word deciduous comes from a Latin word meaning to <u>fall off</u>.



 Primary teeth have been called(temporary, milk, or baby teeth, or deciduous teeth) are teeth that appear in the mouth of a child and stay there for some years before falling and leaving their place to permanent teeth



## Primary teeth

- Primary teeth start to calcify (<u>Calcification is</u> <u>the accumulation of calcium salts in a body</u> <u>tissue</u>) in the fourth month of fetal life
- Emerge in children at ages of 6months to 2-2
  <sup>1</sup>/<sub>2</sub> years



## Mixed dentition

- At the age of <u>6 years</u>, gradually replaced by permanent teeth
- Permanent teeth begin their <u>calcification at birth</u>



## Importance of primary teeth

- It is important to keep sound primary teeth:
- Efficient mastication of food
- Maintenance of a proper diet
- ✓ Formulation of clear speech
- ✓ avoidance of infection and concomitant pain



#### Importance of primary teeth

✓ Maintenance of a normal face appearance





#### Importance of primary teeth

 Maintenance of space and arch continuity for the permanent teeth



gure 3. This image displays the consequence of early loss of aby canines. The loss of space as delineated by the arrows is evident, and it will be impossible for the permanent canines erupt into alignment.

- The development of adequate space is a significant factor in the development of <u>normal</u> <u>occlusal relation in</u> <u>permanent teeth</u>
  - A lack of space associated with premature loss of deciduous teeth is a significant factor in development of malocclusion



Differences between deciduous and permanent teeth

#### General

- 1. Deciduous teeth smaller in size
- 2. Whiter than permanent
- 3. Enamel and dentin layers are thinner than permanent



Pulp cavities are larger
 Primary teeth have fewer anomalies





Primary	permanent
In anterior teeth crown wider in mesiodistal dimesion than cervicoincisal	Larger in cervicoincisal than MD
CEJ	Root - Crown - Crown - CEJ
Primary Maxillary	Permanent Maxillary

Central Incisor

Central Incisor





Primary	permanent
Cervical ridge more prominent	Cervical ridge are less prominent

Primary teeth have bigger cervical bulges

## Differences on crown

Primary	permanent
Occlusal surface of molar is narrow buccolingualy	Less convergence of buccal and lingual surface toward occlusal



#### Differences on crown

Primary teeth	Permanent teeth
Molar occlusal anatomy is shallow (short cusps, ridges are not pronounced and fossae are not deep)	Molar occlusal anatomy is shallow pronounced
Second molars larger than first molars	First molars larger than second molars



- Roots longer and narrower in proportion to crown length and width
- Roots of deciduous molars are thin and slender
- Root furcations are near the crown with little or no root trunk



## On the root

- Roots of molar widely flared/diverge beyond outline of the crown to allow room for development of permanent teeth
- 2<sup>nd</sup> molar roots spreader more than 1<sup>st</sup> deciduous molar





## Description of each primary tooth

#### Maxillary deciduous teeth

- Central and lateral teeth:
- Mesiodistal width is more than labiolingual dimension
- Root: crown ratio, the root length is greater in comparison with crown length than permanent
- From mesial aspect the crown appear thicker because of short crown



#### Maxillary canine

- Crown is more constricted at cervix
- Long well developed sharp cusp
- Mesial slop is longer than distal slope (opposite for permanent max canine)
- Mesial and distal contact area at the same level
- Root is long more than twice crown length
- From mesial aspect: crown appear thicker labiolingualy



## Maxillary first molar

- There are 4 cusps, mesiolingual cusp is the largest, then mesiobuccal, distobuccal and distolingual is the smallest
- Has three roots mesiobuccal, distobuccal and lingual



## Maxillary 2<sup>nd</sup> molar

- Has 5 cusps, 4 is well developed and one supplemental
- Mesiolingual is the largest
- Mesiobuccal
- Distobuccal
- Fifth cusp (distolingual)
- ➤ Has 3 roots:
- Mesiobuccal
- Distobuccal
- lingual





#### Maxillary 1<sup>st</sup> and 2<sup>nd</sup> molars



# Mandibular deciduous teeth

- Central and lateral incisors:
- Iabiolingual width appears more due to short crown (Crown is wide in proportion to its length)
- Root: crown ratio is increased (root is twice the length of crown)



## Mandibular canine

- Labiolingual dimension is less than maxillary canine
- Cervical ridge is less pronounced than maxillary canine
- Distal slope of cusp is longer than mesial slope





#### Mandibular deciduous 1<sup>st</sup> molar

- Has 4 cusps: mesiolingual is largest, mesiobuccal, distobuccal and distolingual
- Has 2 roots (mesial and distal)



## Mandibular deciduous 2<sup>nd</sup> molar

- ✤Has 5 cusps
- Mesiobuccal, mesiolingual distolingual, distobuccal and distal



- ✤Has 2 roots:
- mesial
- distal

