

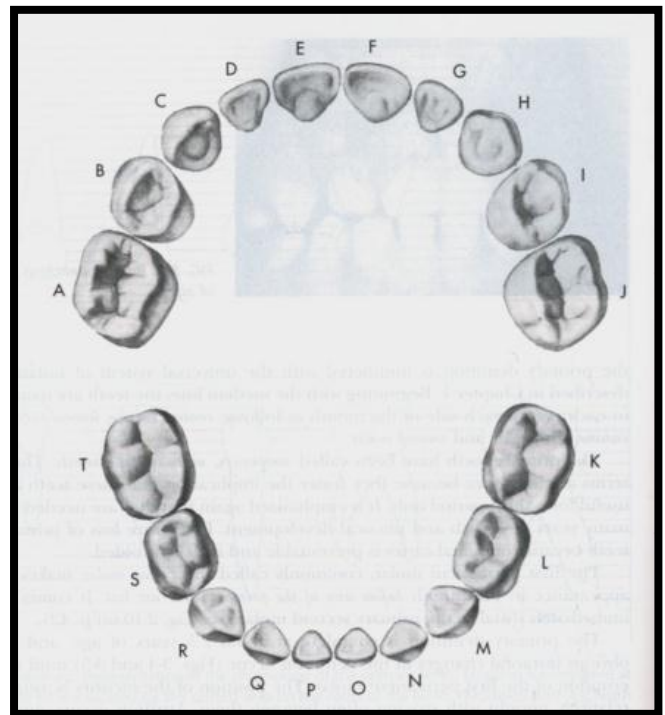
## The Deciduous or Primary Teeth

Primary teeth that start to calcify about the fourth month of fetal life, they emerge in children between the ages of six months and 2 - 2 1/2 years. At the age of six years, these teeth are gradually replaced by permanent teeth that begin their calcification at birth.

### Importance of Primary teeth:

It is important to keep sound primary teeth as they do the following important functions:

- 1- Efficient mastication of food.
- 2- Maintenance of a normal face appearance.
- 3- Formulation of clear speech.
- 4- Maintenance of a proper diet.
- 5- Avoidance of infection and concomitant pain.
- 6- Maintenance of space and arch continuity for the emergence of permanent teeth.

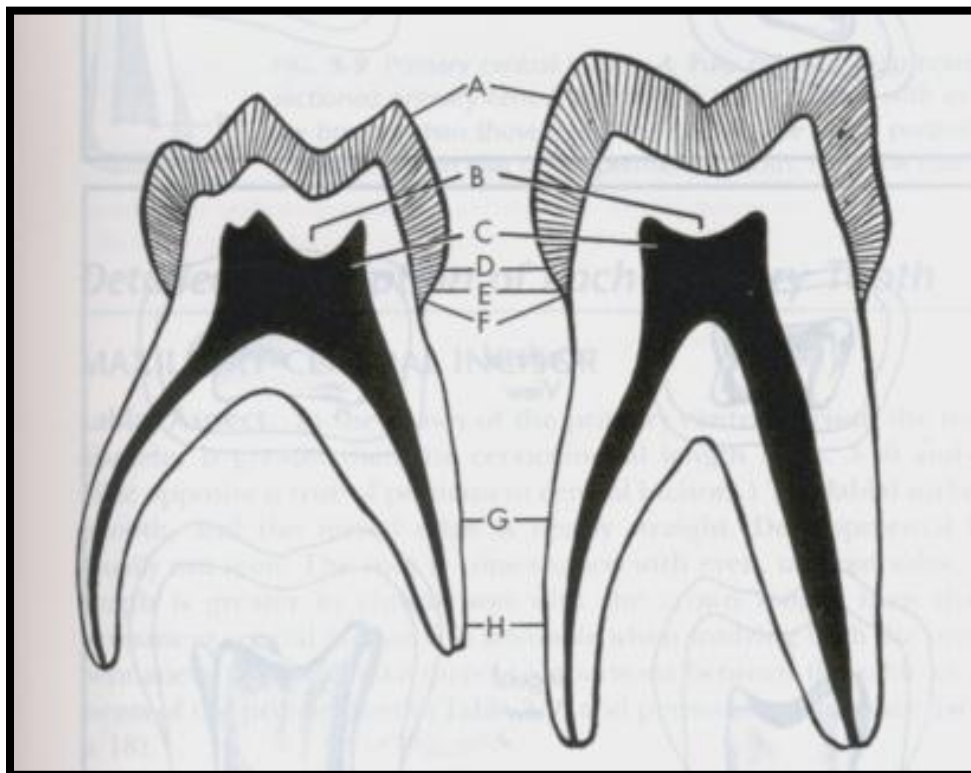


The development of adequate spacing is a significant factor in the development of normal occlusal relation in permanent dentition. A lack of space associated with premature loss of deciduous teeth is a significant factor in the development of malocclusion.

## Major differences between deciduous and permanent teeth:

### A/ General:

1. The deciduous teeth are smaller in size than the analogous permanent teeth.
2. They are whiter in color than the permanent teeth.
- 3- They are less mineralized than the permanent teeth.
4. The layers of enamel and dentin are thinner than on permanent teeth.
5. The pulp cavities are proportionally larger.
6. Primary teeth have more consistent shapes than the permanent dentition (fewer anomalies).



## **B / On the Crown:**

1. The crown of deciduous anterior teeth are wider mesiodistally in comparison with their crown length than are the permanent teeth.
2. The crowns of deciduous teeth have a marked constriction at the cervix.
3. The cervical ridges on the deciduous teeth are more prominent.
4. The molar crowns have a narrow occlusal surface buccolingually (less intercusp distance).
5. The molar occlusal anatomy is shallow (the cusps are short, the ridges are not pronounced, and the fossae are not deep).
6. The second molars are larger than the first molars in deciduous teeth.

## **C / On the roots:**

1. The roots of deciduous anterior teeth are longer and narrower in proportion to crown length and width than are permanent teeth.
2. The roots of deciduous molars are thin and slender.
3. The root furcations are near the crown with little or no root trunk.
4. The roots of molars are widely spread beyond the outlines of the crown, this flare allow more room between the roots for the for the development of permanent tooth crown.
5. The second molar roots are spreader more widely than first deciduous molar roots.

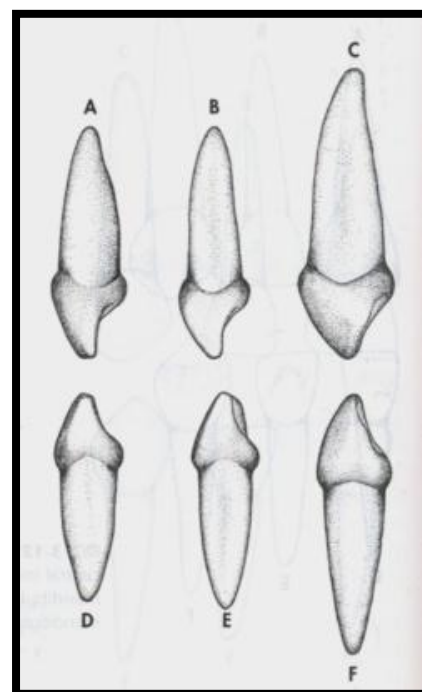
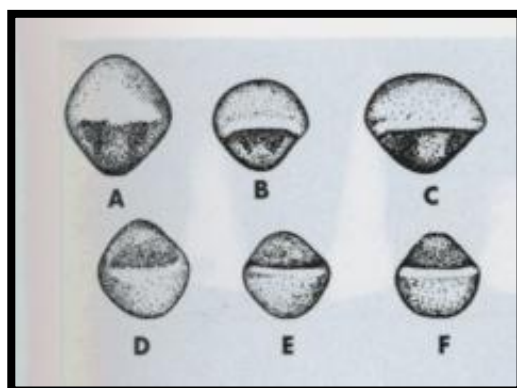
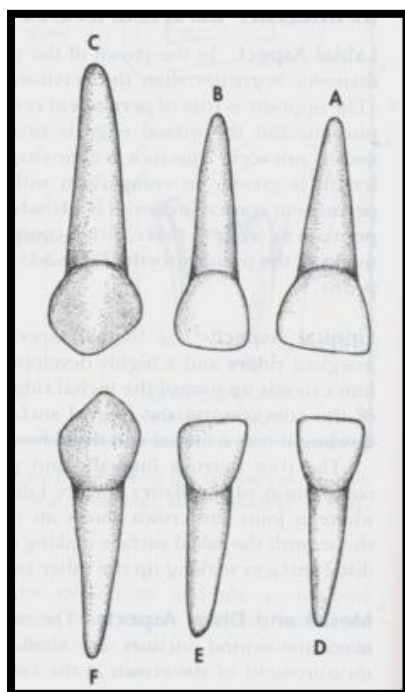
## Maxillary deciduous teeth:

### - Central and Lateral teeth:

- \* The mesiodistal width is more than the labiolingual dimension.
- \* The root : crown ratio is more than that of permanent teeth.
- \* From the mesial aspect, the crown appears thicker because of the short crown.

### - Canine:

- \* From the labial aspect, the crown is more constricted at the crevix, so the cusp and slopes appear more developed.
- \* The mesial slope of the cusp is longer than the distal slope.
- \* Mesial and distal contact areas are at the same level.
- \* The root : crown ratio is increased.
- \* From mesial aspect, the crown appears thicker labiolingually because of short crown length.

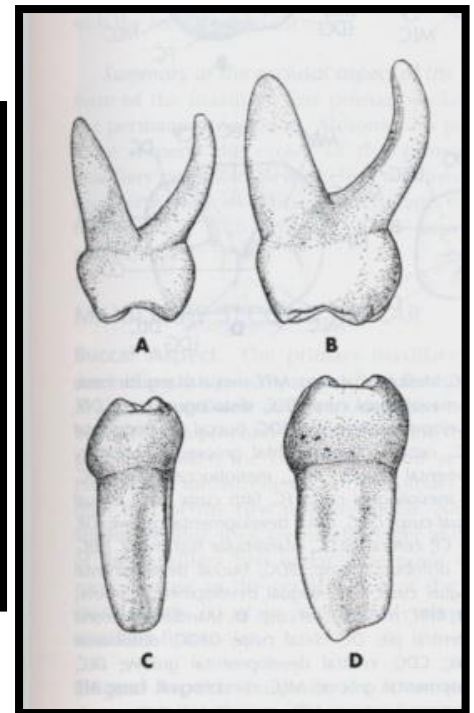
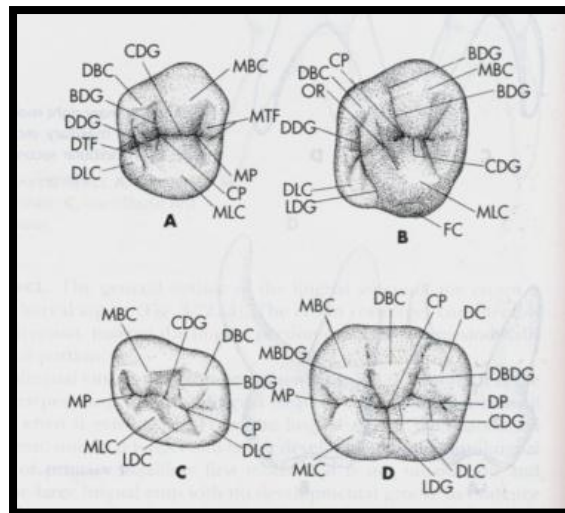
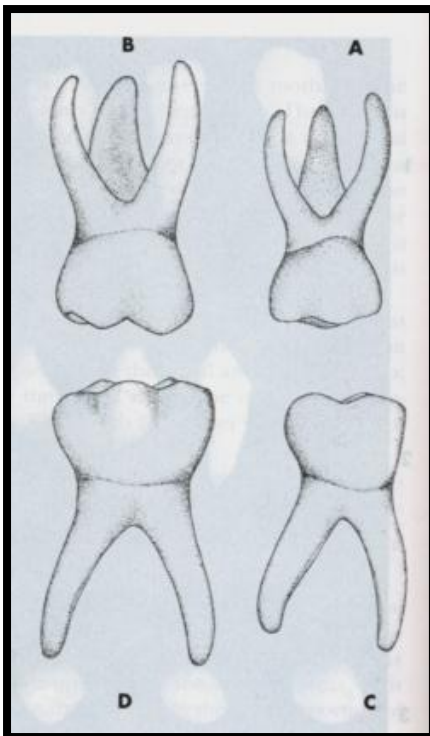


## - First molar:

- \* There are four cusps, mesiolingual cusp is the largest, then mesiobuccal, distobuccal and distolingual is the smallest.
- \* It has three roots mesiobuccal, distobuccal and lingual roots.

## - Second molar:

- \* It has five cusps, four well - developed cusps and one supplemental. The cusps are mesiolingual cusp (the largest), mesiobuccal, distobuccal, distolingual and fifth cusp.
- \* It has three roots, mesiobuccal, distobuccal and lingual root.



## **Mandibular deciduous teeth:**

### **- Central and lateral incisors:**

- \* The root : crown ratio is increased.
- \* The labiolingual width appears more due to short crown.

### **- Canine:**

- \* The labiolingual dimension is much less than maxillary deciduous canine.
- \* The cervical ridges are less pronounced than the maxillary deciduous canine.
- \* The distal slope of the cusp is longer than the mesial slope.

### **- First molar:**

- \* It has four cusps, mesiolingual (largest), mesiobuccal, distobuccal, and distolingual (smallest).
- \* It has two roots (mesial & distal).

### **- Second molar:**

- \* It has five cusps (mesiobuccal, mesiolingual, distolingual, distobuccal, and distal).
- \* It has two roots (mesial & distal).

**END**