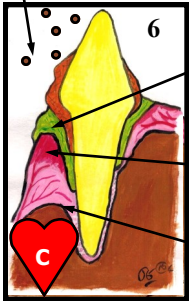


### The Tooth Fairy's Tale

- 1) The **crown** of the tooth is the white part above the gum line. The **root** of the tooth is very long and sits in the bone of the jaw.
- 2) The **gums** are attached to the tooth at the **cemento-enamel junction**. The gums contain blood vessels. The root is attached to the bone of the jaw by the strong **periodontal ligaments**.
- 3) **Plaque (bacteria)** develops on the crown everyday after every meal. In 24 to 48 hours after cleaning teeth a biofilm develops which protects the bacteria from antibacterial solutions. Only tooth brushing will remove this. To start with, the plaque sits on the crown of the teeth but tends to continue to develop.
- 4) **Calcium** which is dissolved in saliva, starts to calcify the plaque to develop **tartar (calculus)**. This tartar can hide harmful bacteria. The tartar and plaque continues to grow up and down the crown and under the gums in the gaps (**sulcus or pocket**) around the tooth.
- 5) When the plaque meets the gum line inflammation of the gums develops from infection caused by the bacteria. Pus develops as the infection progresses into the pockets between the gums and tooth. Initially this infection just causes gingivitis but over time it destroys the attachments of the gum to the tooth and also causes **halitosis** (bad breathe).
- 6) The inflammation eats away the jaw bone around the tooth and the periodontal ligaments. The tooth becomes loose and painful. The chronic infection causes halitosis, nasal discharge, abscesses under the eye and damage to the internal organs (heart, liver, kidneys) in the body.

Calcium dissolved in saliva



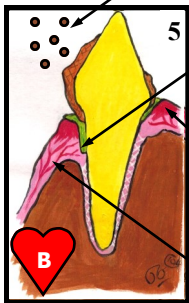
Pus is destroying the periodontal ligaments

Gingivitis

Infection is destroying the supporting bone



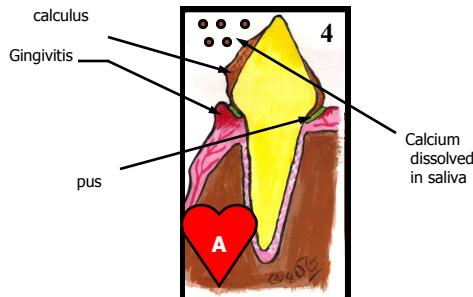
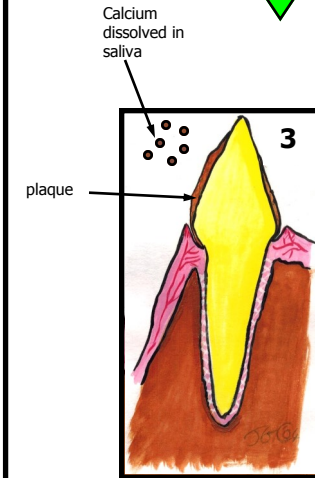
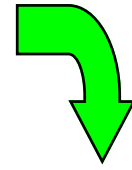
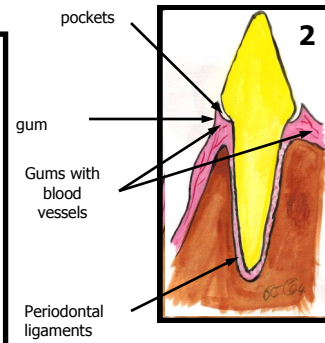
Calcium dissolved in saliva



Infection is destroying the attachment of the gum to the tooth

Gingivitis

Enlarged blood vessels due to inflammation



This is the best time to do a professional dental cleaning. The disease process can be reversed. Anesthesia is needed to scale and polish the tooth. Scaling above the gumline can be done by animal health technicians. Cleaning below the gumline should be done by Veterinarians. Intraoral radiographs of the mouth are needed to diagnose problems in the bone.



If the professional dental cleaning is done at this stage, there is a chance for re-attachment of the gum to the tooth. Curettage under the gumline and root planing (scraping the root clean) is required. This is a surgical procedure and therefore, by law, must be done by a veterinarian.



At this stage the disease has progressed and many of the changes are irreversible. Dental surgery, which may include tooth extractions, is often required. Some teeth can be saved with advanced surgical treatments.

**Preanesthetic blood and urine analysis is required.**

