

A Tooth of many colours

All pets' teeth are white as soon as they have erupted. We often fondly refer to them as their pearly whites. With age, as in the case of humans, teeth get a yellowish colour. This is a normal physiological process and owners should not be alarmed about this. There are however various colour changes that a tooth can undergo which should concern you as owner. Some of the discolouration is restricted to what is deposited onto the tooth and others are from within. Here follows some of the more common discolorations:

Yellowish-brown even black



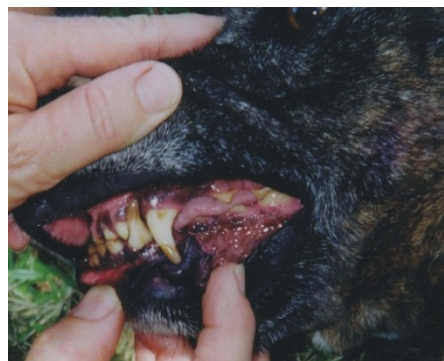
As the bacterial organisation within the plaque (on top of the calculus) change, so the colour of the plaque/calculus may also change. In cases where there is active bleeding in the oral cavity, the calculus may turn black, due to the overgrowth of bacteria that thrives on this blood rich environment. These cases should be worked out to find out what the underlying condition/s are that may cause this spontaneous bleeding.

Plaque is a white velvety material that accumulates on teeth within hours after eruption, brushing or even professional cleaning. Should this deposit not be brushed away daily, it gets incorporated with inorganic salts, mostly calcium. As soon as this happens the plaque is converted to calculus. Calculus is a deposit on the tooth surface and is usually a yellowish brown colour.



Yellow to yellowish-brown in the absence of calculus

Both enamel (outer layer of the tooth) as well as the dentin (inner layer of tooth) has a structural component called hydroxyapatite. There is a type of antibiotic that, if given to a late pregnant bitch or very young puppy, it will bind irreversibly to the hydroxyapatite. This combination has a yellow discolouration at first and as time progresses it may become yellowish-brown.



Pink-red



This usually is indicative of either bleeding in the pulp canal (the core of the tooth where blood vessels and nerves are) or where the tooth has started destroying itself through a process of resorption. In the latter the tooth substance (dentin wall) is eaten from the inside of the tooth and hence the pulp is getting ever closer towards the outside of the tooth. This gives the tooth a pinkish haze. Radiography is usually required to understand the process going on in such a tooth and if there is some remedy for it. Resorptive lesions are far more common in cats than dogs.

Blueish-grey

When a tooth has undergone a traumatic event, like being struck by a golf club, or if the dog runs into a goal post, it causes concussion of this tooth. At first the pulp will bleed if the trauma was severe enough (at this point the tooth may be pink-red as above). The dentin has a tubular structure and with the bleeding and inflammation inside the canal, the blood gets forced into the tubules. As the blood gets broken down by the body and it stays stuck in the tubules, it undergoes a colour change to blue and eventually grey. In teeth of the upper jaw (maxilla) there is usually an accumulation of this discolouration at the crown tip. This is not as obvious in the lower jaw. Teeth with this type of discolouration should be evaluated for viability and treated if they have died.



Should you see any of these changes in your pet, make sure to get to your vet as soon as possible so that he/she may assist your pet to regain its healthy smile.

Till next time – Dr Gerhard Steenkamp

A Tooth Of Many Colours – Written By Dr Gerhard Steenkamp