# **DENTAL DISEASE**

Dental disease is very common in pets especially cats and small breeds of dogs. Dental disease is due to the build up of plaque - a mixture of bacteria, food and white blood cells. Factors that contribute to plaque build up include the type of food fed (avoid sweet, soft sticky foods), the position of the salivary gland duct openings, the breed of pet and the type of bite (many pets have over crowded teeth).

#### A HEALTHY MOUTH SHOWS

White teeth

Breath which has an acceptable odor

Pale pink gums which evenly and tightly encircle the teeth.

### THE SIGNS OF DENTAL DISEASE INCLUDE

Yellowing of the teeth due to plaque build up

Bad breath

Reddening of the gums. A red line means there is pain in the mouth! As the disease advances the gums swell and separate from the teeth exposing the roots. The inflammation in the mouth results in bone resorption so the tooth looses its support and becomes loose.

Pain and chronic discomfort- animals rarely show outward signs of this but once the infected tooth is removed they are so much happier

# PLAQUE CONTROL

The most important way to prevent dental disease is to control plaque development by either:

Physically disrupting the plaque (tooth brushing or encourage chewing)

Chemical products (antibiotics, anti-microbials and enzymatic agents)

#### **TOOTH BRUSHING**

Tooth brushing is the most effective but not the easiest method. Special animal tooth brushes (e.g. Finger brushes) and flavored pet toothpaste do help. For more information please read the tooth-brushing sheet.

## **DIETS**

Feeding RAW meaty bones - Use soft lamb or veal bones. This is one case where bigger is better! For very small pets less then 5kg body weight raw chicken wings can be tried. Care must be taken, as raw chicken can be a source of salmonella. Disadvantages - Bones can break the teeth, get caught in the mouth or intestine and bacteria will grow in old and smelly bones left around the place (e.g. salmonella and campylobacteria). No bone is 100% safe –ideally let your pet chew the meat off the bone (this is like us flossing) then throw the bone away to reduce risks of possible complications.

Special diets - for example Hills T/D and Royal Canin Dental diets when fed daily reduce plaque (available in canine and feline varieties

Rasks and Dentibones - A cereal based chew

*Nylabones* - they can break the teeth or if broken up can cause intestinal upset or blockages. Nutripet supply one of the safest brands, it is annealed so it shouldn't break up.

Rawhide chews - Some pets wont chew them, and some pets love them, if they are left around they can become soft and smelly. They can also cause gastric irritation if large pieces are swallowed.

Chew toys - Things like Kongs and Rope toys. Some pets won't chew them, others will destroy them and they can potentially become foreign bodies causing intestinal upsets or blockages.

CET Forte cat chews - Made of freeze-dried fish are formulated to provide an abrasive cleaning action whilst they chew. They also have enzymes in them to break down the bacteria and plaque in the mouth.

Dentabites - come in 2 flavors and are used as a treat.

*Greenies* - available for dogs & cats, they are hard enough to remove plaque build-up from teeth, but will not chip the teeth. They are proven to reduce bad breath and plaque build-up, improve digestion, diminish oral bacteria and provide good nutrition. One of the key ingredients in Greenies is chlorophyll. Chlorophyll is a plant extract that provides the breath freshening effect of Greenies. Again if a large piece is swallowed they can cause intestinal blockages.

**N.B. no chew treat/toy/bone is 100% safe** - particular care is required for pets that gulp food as large pieces can cause an intestinal blockage (requiring emergency surgery) if swallowed whole.

# CHEMICAL PLAQUE CONTROL

Maxi Guard oral gel - A vitamin C and zinc based gel that reduces plaque build up and bad breath. It is taste free and is well accepted by pets who won't chew or for owners who can't brush the teeth.

Chlorhexidine - Available as a gel or liquid. Although effective it can stain the teeth brown. It is also in some of the special pet toothpaste and gels. There is also a new product (Aquadent) you can add to your pets' drinking water which helps reduce plaque formation.

DO NOT use fluoride, hydrogen peroxide or bicarbonate powder as these are all potentially toxic to gum tissue

#### **DENTAL PROPHYLAXIS**

An anesthetic is essential to perform a complete thorough oral examination of a pet. Until an anesthetic is performed it is impossible to know how severe the dental disease is because:

- 1) Tartar on the teeth hides the tooth and adjacent gum
- 2) Periodontal pockets need to be probed to measure how deep they are
- 3) X-rays are required to assess tissue under the gum line as half of the tooth is below the gum line

Once your pet is anaesthetized any heavy deposits of tartar visible are removed allowing the teeth and gums to be examined properly.

The teeth are cleaned using an ultrasonic scaler and then polished to make them as smooth as possible to reduce further plaque & tartar forming (this is called a dental prophy). The most important tartar to remove cannot be seen with the naked eye because it is below the gum line in the periodontal pockets. If this is not removed, periodontal disease will progress causing pain, gingivitis, bone resorption and tooth loss.

Periodontal pockets are measured - depending on the depth, pockets may be treated by the scale and polish, by packing them with an antibiotic preparation, or in some cases the tooth will need extracting. If the pocket is deep, x-rays may be required to see how much bone destruction has occurred around the tooth root to see if the tooth can be saved. The ability of an owner to follow up with homecare also plays a major role in determining if a tooth will be saved. Diligent, daily brushing of these pockets with regular dental scaling can save some of these teeth but if this is not feasible it is better to extract the tooth than have the pet in constant discomfort.

Extraction is required when:

1) A tooth is broken and the pulp cavity has been exposed (in some cases root canal therapy or pulp

capping can be used to save the function of the tooth)

- 2) A tooth is infected the gingival pockets are deep and infection has resulted in loosening of the tooth
- 3) The teeth are crowded crowded teeth will result in one or more of the teeth to develop periodontal disease and in some cases they result in a malocclusion of teeth which leads to more serious dental problems e.g. retained canines
- 4) A tooth has an osteoclastic resorptive lesions "neck root lesions" it is a hole just below the gum line that enters the pulp cavity of the tooth and is very painful for the pet

- 5) A tooth is discolored pink, purple, gray or tan are all signs of pulp infection, inflammation or death and the tooth either needs root canal therapy or extraction
- 6) A tooth with a chip fracture or worn teeth some of these teeth can be saved but regular x-rays are required to check on the health of the pulp

X-rays may be used prior to and following extraction of teeth (except the really rotten teeth that are very loose) to enable us to know the size, shape and exact position of the roots, to see if the roots are fused to the jaw bone and to assess the health of the tissues surrounding the root. X-rays reveal many things not visible to the naked eye and are an essential part of a complete oral assessment. They are essential prior to removing the lower first molar (as risks of jaw fracture are high at this position) and in cats to look for osteoclastic lesions and to determine the best method of tooth extraction.

Obviously the less severe the disease, the better the prognosis for saving teeth and preventing your pet feeling dental pain. So don't wait until it's too late, start a dental home care program today and get regular dental prophys and examinations for your pets - not only will it freshen their breath but also improve their life quality & longevity.

Although tooth brushing, a good dental diet and using chemical agents may be adequate, some pets will still develop dental disease regardless of the type of home care hence regular dental check ups and dental prophy's may still be necessary.

# **DECIDUOUS TEETH**

Deciduous teeth (baby teeth) should be dislodged as the permanent teeth erupt i.e. they should have all fallen out by about 5-7 months of age. Sometimes the deciduous teeth will remain anchored and won't fall out and will need to be removed. The retained teeth should be removed as soon as both teeth are visible (2 teeth should never occupy the same space) - leaving them can result in the adult teeth coming out at the wrong angle which can result in severe malocclusion problems and it will also result in periodontal disease developing between the teeth.