# Why are Greyhounds Prone to Dental Disease?

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There is little evidenced-based information to help us answer why periodontitis is such a common finding in greyhounds.

There are at least two key features of greyhounds that help explain why periodontitis is so common.

First, like all dolichocephalic breeds (collies, dachshunds, and other sighthounds) the maxillofacial bones are drawn out to be longer than mesocephalic head shapes, and as a consequence, the bones are also much thinner. Since periodontitis implies the loss of the attachment apparatus of the teeth to the skull, thinner bones mean that it takes relatively less disease to result in bone loss in dolichocephalic breeds than other dogs.

Secondly, the majority of greyhounds are those that are retired from racing. Selective breeding for racing attributes might, as an unintended consequence, simultaneously result in other tendencies that favour decreased resistance to periodontitis.

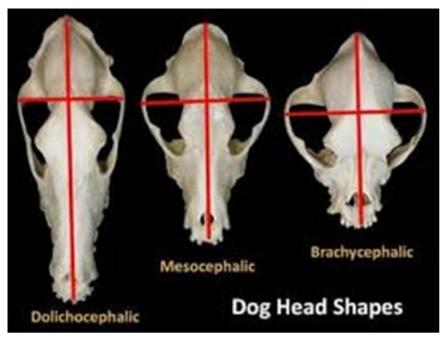
In the end, our focus needs to be alleviation of pain and suffering, and when it comes to the teeth of companion animals, the teeth often serve as an impediment to health rather than providing a critical benefit.

Whereas a wolf or coyote without many teeth would not likely survive, companion animals that are fed a balanced, homogenized mixture of dry or canned ingredients can survive and thrive — even if edentulous (toothless).

There is no pill or injection to manage periodontitis. Neither a more potent antibiotic nor an anti-inflammatory medication will ever be able to address this disease syndrome which largely is a function of hygiene. The severity of periodontitis in greyhounds is likely compounded by selective breeding for both head shape and speed.

# **Dental Care**

Dental disease can have a significant impact on your dog's life span due to its potential effect on the heart, kidneys, liver



and respiratory system. It starts with saliva, food residue and bacteria creating plaque on teeth which builds up along the gums, infecting them, underlying bones and the ligaments that support and anchor the teeth in the jaw.

One of the first symptoms of dental issues is familiar to most of us...doggie breath! (also known as halitosis). Periodontal disease is progressive, usually starting as gingivitis, an infection of the gum tissue. At this point, the condition is reversible with proper care. Without intervention, however, there may be further gum recession (shrinkage), loss of periodontal ligaments and eventually loss of teeth. Bacteria within oral tissues can also potentially enter the respiratory tract causing breathing problems/infections or enter the bloodstream and travel to your dog's vital organs.

The main goal of dental care at home is the daily removal of plaque. Homecare, however, cannot successfully remove dental plaque once it has mineralised into tartar (calculus), nor can homecare alone manage those dogs with established periodontitis (inflammation of the tissues surrounding the teeth).

Brushing is the most important tool for home dental care

The gold standard for plaque removal and for the prevention of periodontal disease, is daily teeth brushing.

Given time and patience, most greyhounds will happily accept having their teeth gently brushed. Ask your vet to give you a demonstration on how to do this properly. If your greyhound's teeth already have heavy tartar build up, you will not be able to brush it off (as tartar or calculus is calcified plaque); professional veterinary cleaning is required. Ideally your dog should have its teeth brushed daily with toothpaste formulated specially for dogs. Don't use toothpaste made for people or baking soda as your dog won't spit it out! Meat flavoured toothpastes for dogs are readily available at most veterinary clinics, as are special pet finger brushes and toothbrushes.

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### **Diet**

There is no "one" diet which will prevent dental disease but you can help your dog by avoiding lots of soft/sticky foods. There are a few good quality dry foods available which may aid dental health either by mechanically abrading the tooth surface (Hills TD dry) or via added chemicals which bind calcium in saliva (e.g., Royal Canin Dental) thus reducing "mineralization" and the formation of tartar. There are also numerous "treats" (rawhide, pig's ear, etc.) and specific dental chews which inhibit plaque (e.g., Oravet), which, when given regularly, can promote healthier mouths. Your vet can advise on what may be most suitable for your greyhound.

### Bones or no bones?

Whether to feed dogs bones to maintain dental health is a hotly debated topic amongst dog owners and veterinarians alike. Anecdotally, dogs regularly fed bones do appear to have less plaque/tartar build up. There is, however, actually no evidence in literature showing beneficial effects of a "natural" bone-including diet on oral health. Most veterinary dental specialists discourage bone feeding due to this lack of proven benefit and the potential risk of tooth fractures, gastric upsets, blockages, obstructions, perforations and constipation as well as bacterial infections.

If you do choose to feed your Greyhound bones, the following rules are a must:

- Never feed cooked bones they will become brittle and may splinter
- Do not feed chicken bones (a recent study has found a link between raw chicken bones and a rare, paralysing neurological condition caused by Campylobacter bacteria)
   Salmonella is also a potential risk with raw chicken
- Always supervise a dog with bones and pick an appropriate bone size to avoid potential choking or tooth breakage (by overzealous chewing of large bones)
- Dispose of bones within 24 hours



Flora Scott's Miss Nellie participates in a reading dogs program while enjoying the school couch

### Food/water additives

Dog and human plaque bacteria are different, so products targeted at human oral bacteria may not be suitable for preventing dental disease in dogs. Your vet can recommend "dog specific" products which can be added to food and water to aid in maintaining dental health.

In summary, we would recommend the use of three different methods to clean your dogs' teeth:

- 1) brushing,
- 2) dental dry food such as TD dry
- 3) three different shaped dental chews

No one method will be adequate unless you can properly brush your dogs' teeth every single day.



