

Dr. Peter Emily Rates Dental Care Products

Dog Food: Dry dog food really does help keep the plaque down on teeth. But it only helps in the area that's visible, not in the all-important area just below the gum line, where it does nothing to prevent gum disease.

The truth is, anything you put in the mouth will break off some of the tartar simply through a scraping action. Plaque is continually removed as your dog chews... but redeposited as soon as he stops chewing. The only way to remove the plaque that causes gum disease (in the sulcus, or pocket, below the gum line) is by brushing or a cleaning by a veterinarian.

Tartar Check™ Biscuits: These biscuits from Heinz Pet Products are supposed to reduce tartar buildup above the gum line by 45%. They do very little for the critical tartar below the gum line. They contain sodium hexametaphosphate for tartar control.

Milk-Bone and Other Biscuits: These claim to reduce tartar, but the fine print always says above the gum line. Brushing does that best, and everything the dog eats does it to some degree. The area of concern is below the gum line, where the nasty bacteria and plaque hide, rotting away the gums and bone. Don't buy these products just for their tartar control benefits. It's minimal. Brush the teeth instead – you'll get under the gums, too.

C.E.T. Products from VRx Products: Available at the veterinarian's office. Some products also sold in pet stores and discount stores under the St. Jon label. C.E.T. toothpaste is excellent, containing enzymes that help clean the teeth. A C.E.T. tooth brush is designed specifically for use with dogs.

C.E.T. @ Chews: These are excellent. They're beef hide strips, flavored with poultry and beef digest, and laced with C.E.T enzymes that help get the plaque out. The mechanical action coupled with the enzymes helps keep the teeth clean. But of all the things you can get for your dog, this one is the best. Be sure to monitor your dog for choking though.

Chew-eez®: These rawhide strips from the supermarket are fine, but don't have the enzymes found in the C.E.T. rawhide chews. The label on Chew-eez now talks about the teeth-cleaning benefits. But that's above the gum line. While these do have a mechanical cleaning action, it's nowhere near what's necessary to get everything clean. Be sure to monitor your dog for choking.

Knotted Rawhide Bones: Forget these things. The dog will try to swallow the knot and choke. Teeth cleansing is better with flat rawhide strips

anyway. Always give rawhide under strict supervision.

Chopped Rawhide Treats: Safe for the dog, because they are quickly chewed down to small granules. But they don't provide much chewing exercise, or mechanical action against the tartar. Dogs follow the carnivore rule of eating: Grab anything that's in a small-enough piece to swallow without choking, and wolf it down. They don't generally bother much with chewing. There's actually a good reason for this. A carnivore traditionally ate a predigested diet of food – what was in the stomach of his prey. That explains why dogs just wolf it all down. Unlike cows, they don't have to re-chew and ruminate the food to break it down. Unlike people, dogs don't have to chew to mix food with saliva to help break it down. In the dog's view, anything that's small enough to swallow and get past the windpipe is OK. With rawhide, the continual chewing is to try to get the food (rawhide) into smaller bits to swallow. That continual chewing gives the needed exercise and helps keep the teeth clean.

Cow Bones: Dogs have been chewing animal bones for centuries, so in theory they should be safe. But I've seen slab fractures on the teeth of wolves. So, be judicious when giving your dog bones. The key seems to be the size of the bone and how dense it is. Big, round knuckle bones are safer than small, thin femur bones because the dog can't get the whole bone in his mouth. The wider the mouth is open, the less force is out on the teeth. It's fine for the dog's teeth to slide off the side of the bone – but not for the teeth to crunch straight down on a small, hard object. If you give your dog a bone, give one he can't get in his mouth. And don't give cow hooves – they're too small and too hard.

Hill's Prescription Diet® t/d™ Dog Food: This food, available only from veterinarians, has been in development for many years. It has a patent-pending formulation and process that's unique among pet foods. Canine t/d uses an oversize kibble, shaped like a ball, that contains fiber strains. As your dog bites in and crushes the food, the food scrubs along the tooth surface up to the gum line. Think of it as a large Shredded Wheat® ball, cleaning your teeth as you chew. Hill's states that, in its tests, Prescription Diet t/d produced 19% less plaque accumulation and 32% less tartar accumulation, compared to Purina® Dog Chow®. There was 10% less plaque accumulation and 15% less tartar accumulation than Dog Chow and weekly tooth brushing with a C.E.T. toothbrush and toothpaste.

Their ads in the vet journals claim that the product is "As effective as weekly tooth brushing for the reduction of plaque, stain and tartar."

Well, yes, perhaps, but remember, they're talking about above the gum line. Nothing your dog eats is going to eliminate gum disease because this food does nothing for the area under the gum.

Because the food helps keep the teeth clean, yes, it's probably a good solution to part of the problem, especially if your dog won't let you brush his teeth. But it's no substitute for the mechanical action of a toothbrush cleaning the teeth and under the gums. Also, a cleaning by a vet will still be needed.

Canned Dog Food: Not so good, because it doesn't give the chewing pleasure that dogs need. Dogs on canned food need soft chew toys to provide the exercise of the supportive ligaments that dogs get from chewing.

Rubber Chew Toys: If it's poor quality rubber, the dog can chew off bits of rubber and choke. If those bits manage to get past the airway, they may obstruct the bowel. Use cheap toys only under supervision and examine toys periodically. If a piece of it breaks off, take it away, and watch the dog. Better yet, use a high-quality toy (see Kong).

Kong®: Kong Toys (also sold under the Tuffy® label) use the best grade of rubber available. In fact, they've recently upgraded to a new space-age rubber that's even better quality. For safety, the Kongs are the best. For teeth, they're soft and safe and won't break the teeth. BE sure to match the size to your dog. And note that there are red and black varieties. The black ones are incredibly durable, for power chewers. Some dogs may not enjoy chewing rubber, though, but may enjoy playing with these oddly bouncing balls. (You can also stuff treats in the middle to get the dog to chew.)

Dental Kong®: This is one of the few things that really helps above and below the gum line, although nothing can take the place of the mechanical action of the toothbrush. This soft, durable toy actually helps clean below the gum line. It does an excellent job of cleaning there, as it has fine ridges that get up under the edge of gum tissue. The Dental Kong also has a rope that helps clean back teeth as the dog chews. Get the appropriate size for your dog. If your pet store doesn't stock Dental Kong, have them order it for you.

Plastic Bones: Soft plastic bones, such as the Gumabone®, don't create as many broken tooth problems as hard plastic bones. As far as cleaning, the soft bones give a soft sense of chewing, and give masticatory harassment – exercise of the periodontal ligaments, which are the supportive tissues of the tooth. The Gumabone gives good resistance and good

dental exercise. As for hard plastic bones, stay away. They have nasty tendency to cause broken teeth.

Cotton Rope Bones: These do no harm. They will mechanically remove some debris from the teeth, and the dogs enjoy chewing them. (Be sure to supervise your dog with any rope – some dogs will try to swallow them whole.) Some companies suggest that playing with their nylon or polyester filament rope bones helps your dog floss. Dogs don't need their gums flossed. In fact, flossing can actually damage the gums.

Dogs' teeth only touch in one or two places (unlike your teeth), and their teeth are narrow, not broad like yours. People need to floss to get between teeth and under the gums. But for your dog, a toothbrush reaches 90% of the surfaces that need to be cleaned. The toothbrush doesn't always reach the far back teeth, which is not a big deal. Chewing on a cotton rope bone can help clean those back teeth.

Toothpaste, Mouthwash, and Plaque Rinses for People:

While these products for people have some benefits for people, they're all designed to be used, and then expectorated. (That's a good word meaning "spit out.") Even Lassie hasn't learned the trick of holding liquids in the mouth and spitting on command. Because these products all use chemicals and detergents to do their work, they can upset the balance of the gut if swallowed. Stick with products specifically made for your dog.

People Toothbrush: Since you'll be the one operating the toothbrush, it's fine to use one designed for people. Pick a soft, nylon brush. Oral-B and Butler make good ones. Use a smaller child's size for smaller dogs. C.E.T. makes toothbrushes specifically designed for use with dogs and cats, and those are excellent, too.

Teeth Cleaning Pads: Petrodex makes one that works just fine, but the pads don't get under the gum line. And frankly, an old nylon stocking wrapped around your finger works as well. The only difference is the teeth-cleaning enzyme.

Finger Brushes: These fit onto your finger tip, and let you brush your dog's teeth without your dog knowing it. The bristles are a bit too large to effectively get under the free margin of the gingival (the gum line). A toothbrush is better, but finger brushes are second best. And, if they let you get the job done easily...

Electric Toothbrush: The Interplak is great, better than anything you can use, if your dog will tolerate the electric motor noise. The Braun is also good. Both run the bristles of the brush in a circular motion for more effective cleaning, especially under the gum line. You don't even need toothpaste for it to work well. Whether your dog likes it or not, get one for yourself, with a second brush head for your dog. Your dentist

will smile at your gums and you may save yourself a load of expensive grief both for you and your dog!

About Doggie Breath: Imagine how your breath would smell if you didn't brush your teeth for years. That's because of the huge buildup of plaque. Remember, 80% of plaque is bacteria. In fact, there are 400 different strains of bacteria that have been found in the mouths of all mammals. Some produce odor, others cause decay, which is where gum disease comes from. This is a direct result of plaque. If you want to eliminate odor, eliminate the disease and the plaque. The only way is daily brushing. Dogs' teeth are easier to brush than your own. Dogs generally form most of their plaque on the outside of their teeth. But occasionally they form plaque on inside surfaces as well. It's tough to brush inside there, so concentrate on doing the outside surfaces, and take your dog to the veterinarian periodically to clean the inside surfaces.

Chlorhexidine Rinses: These rinses are available only by prescription for people, and useful in cutting plaque by reducing bacteria. Use in animals doesn't require a prescription. Chlorhexidines are polybiguanides, developed in World War II as anti-malarial drugs. In Europe, especially in France, they've been used as oral hygiene rinses for periodontal disease. Recently, they've reduced the concentration down to where it kills the bacteria and doesn't taste horrid: 0.12% is the smallest concentration that works. Chlorhexidine gluconate or digluconate works better than Chlorhexidine acetate.

C.E.T. makes a rinse that's Chlorhexidine gluconate. It's more effective, but still has to be kept in contact with gums for the same amount of time. Better still, C.E.T. sells a gel through veterinarians. It has some binders that cause it to stick to the gum tissue, keeping it in contact long enough to be effective. It's called CHX gel.

Oramed: There's a new product veterinarians can get called Oramed (from PACHE in Denver, (303) 477-1919). It contains 1.2% Chlorhexidine gluconate as an antibacterial, deoxy delta glucose and lysine as an antiviral, and potassium sorbate as an antifungal. This product covers the whole spectrum of organisms that can cause oral infections, and can be used daily, as well for helping heal diseased gums.

MaxiGuard: Here's a terrific product that kills the bacteria, keeps the breath smelling sweet, and can actually help heal the gum tissue. You still have to keep after the plaque, though. It's called MaxiGuard, and it's available through your veterinarian. MaxiGuard comes in two forms: a spray and a gel.

MaxiGuard contains zinc ascorbate plus the amino acid cysteine. Sulfamino acid potentiates the zinc to make it kill bacteria. It does this by rupturing the bacteria cell's membrane. Zinc

also helps heal the gum tissues, revitalizing the lost collagen component in them. It also breaks down the bacteria that creates mouth odors. Of course, unless you brush, the odors will come back again, because the thing that caused the odor (plaque) is still there.

The product contains vitamin C powder, which must be mixed into the spray or gel to activate it. (Your vet may do that for you.) They spray should be refrigerated to keep it fresh, and does have a bit of a "vitamin C" tang to it that your pet may not appreciate when you spritz a little in his mouth.

The gel has no taste, so it is a little more readily accepted by dogs. (And the spray noise won't scare them.) You can just put a little gel on your finger and rub it along the gums, so it's easy to use. (The manufacturer only sells through veterinarians, who can call (816) 248-2215 to find out where to order it.)