

DENTAL CARE: IS IT *REALLY* HELPFUL?

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I know: The idea of getting a toothbrush into your cat's mouth several times a week is off-putting. And you have to wonder, is toothbrushing, at-home dental care, and professional cleaning really worth the time and effort?

Extending Quality And Quantity Of Life

Just as with humans, feline dental care offers far more than a sweet smile and fresh breath: It's actually an important component for good overall health and for quality of life, says Susan Little, DVM, Diplomate of the American Board of Veterinary Practitioners (Feline), and President of the Winn Feline Foundation. Why?

1. For starts, two of the most common diseases seen in cats are gingivitis/stomatitis (inflammation of the gum or mouth) and feline odontoclastic resorptive lesions (FORLs or "cavities"), says Little, who owns and practices at Bytown Cat Hospital in Ottawa, Ontario. "FORLs are painful and lead to tooth loss; gingivitis/stomatitis can lead to chronic inflammation, oral pain, decreased appetite, and systemic effects (disease that can develop in other parts of the body)."
2. When teeth are neglected, periodontal disease develops. As a result, warns Little, bacteria from the mouth may travel through the rest of the body, possibly leading to an increased risk of systemic problems such as kidney or heart disease.
3. Through regular toothbrushing, the cat owner can pick up sooner on developing oral problems. For example, if your cooperative cat suddenly wiggles and squirms when you brush one side of her mouth, something has likely changed for her -- a loose or broken tooth, gum disorder, even a tumor. Ditto if you start finding a little blood on your cat's toothbrush. It's far better to catch and treat these problems early versus treating *after* your cat has lost weight because it's too painful for her to chew.

R_x For A Healthy Mouth

Now that you're convinced that oral health contributes to overall health, the steps you take to achieve a healthy mouth for your cat are pretty similar to the dental practices you follow for yourself. As with humans, the protocol for good oral feline health consists of routine at-home care (to remove plaque and prevent tarter, the main cause of gum and tooth disease) coupled with regular veterinary oral exams (to look for and correct other dental problems and to remove any tartar build-up).

At-home care

"Plaque is bacteria that colonizes on the tooth surface in as little as 6 to 8 hours," says Steven E. Holmstrom, DVM, Diplomate of the American Veterinary Dental College and a practitioner at the Animal Dental Clinic in San Carlos, California. Plaque is caused, in part, from food debris that accumulates on the teeth. "If not removed by brushing, this bacteria will die in 3 to 5 days and become calcified bacteria -- calculus or tartar.

Another layer of bacteria (plaque) grows on top of this and continues the cycle." Once formed, tartar can only be removed by "scaling" the teeth, that is, a professional dental cleaning.

The most effective means for controlling plaque is by brushing the teeth. "Tooth brushing results in the disruption of plaque that adheres to the tooth, especially along the gum line," explains Gary J. Spodnick, DVM, Diplomate of the American College of Veterinary Surgeons, and Chief of Surgery, Veterinary Specialty Hospital of the Carolinas, in Cary, North Carolina. "A variety of pet dentifrices (toothpastes) are available but the most important thing is not what brand is used to brush the teeth, but that the teeth are brushed. It is the mechanical action of brushing that is most effective at removing the plaque."

(It *is* important, however, to use a toothpaste designed especially for pets, and not a human brand. That's because pets swallow toothpaste, unlike humans who spit out the paste; human toothpaste could cause tummy upset.)

You can probably control plaque by brushing every three days, but the most successful brushers, says Holmstrom, are those who brush daily. "The reason is that it's much easier to establish a habit if you do something daily."

Dental diets and dental chews can also help reduce plaque, but they should be used in conjunction *with* toothbrushing, not as a substitute for brushing, notes Holmstrom, as dental diets and chews are not as effective as brushing.

"Dental diets are formulated so that as the kibbles are chewed, the teeth penetrate into the kibble without the kibble shattering or breaking into smaller pieces," Spodnick says. "This provides an abrasive, auto-brushing effect, which helps remove the plaque from the surface of the teeth."

Dental chews work similarly as dental diet by removing soft deposits of plaque from the surface of the teeth. "The drawback with chews is getting the patient to chew them with all tooth surfaces," says Holmstrom.

Professional care

For sure, toothbrushing goes a long way in keeping your cat's teeth healthy, but it's still important that your cat receive a dental check-up as part of her yearly physical to look for signs of dental disorders. Sometimes an owner will see clinical signs of an oral problem -- odor, bleeding, pain, or difficulties eating or chewing -- but often these signs don't become an issue until the problem is quite advanced. Your veterinarian should be able to spot a minor dental problem before it becomes major dental problem.

Some of the common dental disorders your veterinarian will look for include periodontitis, gingivitis, FORL, oral tumors, and stomatitis. Treatment depends upon the condition and the severity of the disease, but can include dental cleaning, extraction, surgical excision, and medications.

Current feline health guidelines recommend professional cleaning of your cat's teeth at least once a year for the same reason that your dentist cleans your teeth on a regular basis: To remove the plaque and tarter from the little crevices and pockets that a toothbrush misses. If your cat has chronic dental problems, she may need to have her teeth cleaned more often.

For Health's Sake

When it comes down to it, feline teeth are not so very different from human teeth. If you've ever suffered a loose tooth, broken tooth, or some sort of inflammation of the oral cavity, then you know how miserable these problems can be.

The same goes for your cat. It just makes sense to use health preventions that help reduce the risk of these painful occurrences in your feline friend, to stay on top of budding dental disorders through routine dental care, and to help keep your cat's mouth clean and healthy.

GETTING STARTED

Although it's usually easier to begin toothbrushing in a kitten than in an adult cat, most adult cats can be coaxed into tolerating toothbrushing.

"There are two methods of introducing toothbrushing: You can get the family or neighborhood together and fight the cat, which will not work, or you can work into brushing on the cat's terms!" says Steven E. Holmstrom, DVM, Dipl AVDC.

"I start out with a flavor the cat really likes," Holmstrom continues. "It could be one of the toothpastes that the cat likes or juice from water-packed tuna. The 'toothpaste' is not important, it is the brushing action that is important. Put the flavor on the toothbrush and rather than attacking the cat with the brush, just offer it to the cat. Let them lick the brush perhaps 5 - 6 times a day.

"When the cat sees this as a flavor time, you can start brushing. At first, this is not very effective. The cat is trying to lick and you are trying to brush. But don't restrain your cat: This will get better with time!"

"Gradually you can work into things like electric toothbrushes, etc. The key is patience and persistence!"

One caveat: If you are introducing toothbrushing to an adult cat, do so after an oral exam and professional dental cleaning. "This allows for treatment and healing of any pre-existing dental problems that could be painful during brushing," Holmstrom states.

WHAT'S INVOLVED WITH A PROFESSIONAL CLEANING?

Although scaling and polishing feline teeth is not much different than what we humans experience during our routine dental cleanings, unlike human cleanings, cats and other animals must be anesthetized for their dental procedures: Conscious animals are not going to be quietly compliant while someone pokes around in their mouths for an hour.

Although protocols for dental procedures will vary from patient to patient, and vet to vet, pre-anesthetic bloodwork appropriate to the cat and a complete physical examination is typically recommended in order to assess your cat's health, explains Susan Little, DVM, DABVP (Feline). These precautions help ensure that your cat is otherwise healthy to undergo anesthesia.

Prior to your cat's procedure, you'll be asked to withhold food for several hours. "Most veterinarians recommend withholding food from cats for about 8 hours before anesthesia, but not withholding water," Little continues. Withholding food minimizes the chance of vomiting and aspiration while the cat is anesthetized.

An IV catheter will be placed into your cat's vein for delivery of anesthetic drugs during the procedure. The catheter also serves as a port for providing emergency drugs, should the need arise, and for administration of IV fluids during the procedure -- IV fluids help maintain blood pressure, preserve hydration, and provide internal organ support.

During the procedure, the veterinarian typically charts the teeth, noting if any teeth are missing, diseased, or damaged. "The depth of the gingival sulcus [the crevice that surrounds the tooth] should be measured around each tooth, as deep gingival pockets allow for greater accumulation of plaque and calculus and accelerate the process of tooth loss," reports Gary J. Spodnick, DVM, DACVS.

After the charting, the teeth are "scaled" – that is, plaque and calculus are removed from the tooth surface using hand instruments and power scalers -- then polished with a dentifrice. "Polishing removes small scratches or etches on the surfaces of the teeth left by our instruments as well as small deposits of plaque and calculus that were not effectively removed during the scaling process," Spodnick explains.

The time involved to perform a cleaning and any additional needed treatment varies in duration according to the problem. Says Spodnick, "More extensive disease requires upwards of an hour or more for satisfactory treatment, especially if dental extractions are required."

Depending upon your cat's treatment, your veterinarian may prescribe the use of oral antiseptics and antibiotics.

"Generally, dental prophylaxis is a safe procedure," Spodnick notes. "Perhaps the most concerning and potentially life-threatening aspect of the procedure is general anesthesia. Older patients should have screening bloodwork and even thoracic

radiographs [chest x-rays] made to assess cardiac condition." The anesthetic plan should consider any concerns regarding your cat's health."

CLEAN 'N' SAVE

Studies confirm that by reducing the severity of dental disease, at-home dental care also reduces the frequency for which professional dental cleanings are needed.

DENTAL DICTIONARY

Calculus: Calcified plaque. Also known as tarter.

Dentifrice: A paste, powder, gel, or liquid used for cleaning teeth.

FORL: feline odontoclastic resorptive lesions ("cavities").

Gingivitis: inflammation of the gums.

Periodontal disease: a group of conditions that involves inflammation of the gums and other structures that support the teeth. Periodontitis is caused by bacteria found in dental plaque and often, but not always, starts as gingivitis.

Plaque: Bacteria that grows on the tooth surface.

Scaling: The removal of plaque and tarter via instruments.

Stomatitis: inflammation of the mouth

Tartar: Calcified plaque. Also known as calculus.