



# WE CAN DO IT THE HARD WAY... OR THE EASY WAY!

by Herb Moskowitz, DDS

*The latest research reveals that molecular iodine as a pet water additive is more effective for periodontal health than veterinarian-supervised daily brushing.*

Periodontal disease is the most commonly-diagnosed condition in small animal veterinary medicine. In the vast majority of cases, treatment often isn't started until very late in the disease process, because there are few outward clinical signs in the early stages. Consequently, periodontal disease is also the most undertreated animal health problem.

Gum disease affects a lot more than just the mouth. Unchecked, it has numerous potentially dangerous health consequences for dogs and cats. Oral infection, tooth loss, and increased incidence of oral cancer are localized manifestations. More serious problems linked to periodontal disease include kidney, liver, lung and cardiac diseases, osteoporosis, adverse pregnancy effects, and diabetes.<sup>1</sup> In fact, the link between periodontal disease and heart disease is so strong that periodontal disease is now considered a direct cause of heart disease.<sup>2</sup> The onset of periodontal disease starts with dental microbial biofilm (dental plaque) formation and the associated immune-inflammatory response of the animal to that plaque buildup.<sup>3</sup>

## WHAT CAN WE DO ABOUT IT?

You can help reduce dental plaque by vigorously brushing your dog or cat's teeth daily.<sup>4</sup> But uncooperative pets, and the challenges of daily brushing, often result in unsatisfactory outcomes. Less frequent brushing results in even poorer outcomes.

Wouldn't it be simpler to reduce plaque and control bad breath by using a daily pet water additive? Adding a few milliliters of treatment solution to a dog or cat's drinking water each day is almost effortless, and easy to maintain compared to struggling daily with an unwilling animal. Current research shows that it can even be more effective than brushing.

## ADDING MOLECULAR IODINE

While several products have been promoted as water additives for dental health, there has been scant evidence of their efficacy. However, a first-of-its-kind molecular iodine water additive was recently studied for its effectiveness in reducing dental plaque in an evidence-based approach (see sidebar). The study showed that the molecular iodine water additive reduced more plaque than veterinarian-supervised daily brushing.



## THE EVIDENCE — MOLECULAR IODINE OUT-PERFORMED DAILY BRUSHING

A molecular iodine pet water additive was evaluated in two double-blind, placebo-controlled and diet-controlled clinical trials, following Veterinary Oral Health Council (VOHC) guidelines. Each 28-day trial involved 25 dogs whose plaque was measured by a trained veterinarian. Treatment was well tolerated by the dogs and resulted in an average plaque reduction of 44%. The molecular iodine product used in the studies earned the VOHC Seal of Acceptance. Other study observations included the elimination of bad breath in treated dogs, and no changes in thyroid hormones after 28 days.

In contrast, a plaque reduction study involving toothbrushing, published in the *Journal of Veterinary Dentistry*, showed that brushing was significantly less effective. These study results are compared at right.

The greatest plaque reduction was obtained by the use of molecular iodine. With a 44% reduction of plaque within 28 days, plaque reduction through the use of molecular iodine was significantly greater than the plaque reduction obtained even through daily, veterinarian-supervised brushing.

Molecular iodine (I<sub>2</sub>) is the only species of iodine<sup>5</sup> that kills harmful microorganisms. It is non-staining, whereas other types of iodine stain teeth and can be toxic to dogs and cats.



## % OF PLAQUE REDUCTION OVER 28 DAYS

**9.9% REDUCTION** VETERINARIAN-SUPERVISED BRUSHING — WEEKLY

**24.8% REDUCTION** VETERINARIAN-SUPERVISED BRUSHING — EVERY OTHER DAY

**37.4% REDUCTION** VETERINARIAN-SUPERVISED BRUSHING — DAILY

**44% REDUCTION!** MOLECULAR IODINE WATER ADDITIVE

The molecular iodine referenced in the studies is incorporated into ioVet™ Oral, a pet water additive ([www.iovetproducts.com](http://www.iovetproducts.com)). The same advanced technology is used in human oral care products and is recommended by thousands of periodontists and dentists throughout the U.S. ([www.iotechinternational.com](http://www.iotechinternational.com)).

Despite our best efforts, periodontal disease has reached epidemic proportions in dogs and cats. Fortunately, molecular iodine is an effective, easy-to-use option that can play a major role in helping reduce dental plaque — and subsequent issues with periodontal disease — in companion animals.



<sup>1</sup>Niemiec, B. Periodontal disease. *Top Companion Anim Med*, 2008.

<sup>2</sup>Bale, B. et al High-risk periodontal pathogens contribute to the pathogenesis of atherosclerosis. *Postgrad Med J*, 2017.

<sup>3</sup>Dos Santos J. et al Relationship between periodontal disease and systemic diseases in dogs. *Res Vet Sci* 2019.

<sup>4</sup>Harvey C et al. Effect of Frequency of Brushing Teeth on Plaque and Calculus Accumulation and Gingivitis in Dogs. *J Vet Dent* 2015.

<sup>5</sup>Trettenero S. Molecular iodine as a new frontline defense against COVID-19 in the dental office. *Dentistry IQ* 2020.

Herb Moskowitz, DDS, has over 25 years of clinical dental practice experience. He is a serial entrepreneur, having founded several public and private medical technology companies and developed a variety of medical products. He currently serves as Chairman of iotech International.