

A Proactive Approach to Oral Health for Dogs And Cats

Developed and reviewed by the members of the Standard Process Veterinary team

Integrative Nutritional Support of Dental Health for Pets

Periodontal disease is the single most common problem diagnosed in dogs and cats.¹ Things to consider:

- Small breeds are genetically prone to dental disease. Brachycephalic breeds are prone to tooth crowding and poor tooth alignment. Some animals with immune challenges should undergo professional veterinary cleanings.
- Oral and dental health significantly affects overall systemic health in both animals and humans.
- Studies show chronic disease in the mouth affects the rest of the body as a constant source of chronic inflammation as well as bacterial burden.²

Plaque: the Real Culprit

Periodontal changes are caused by plaque bacteria building up on the teeth, triggering an immune response. The development of these changes is influenced by plaque buildup, the variety of bacteria present, and the health of the body's immune system. Plaque on tooth surfaces continuously exposes the gums to antigens, causing inflammation and leading to gingivitis.

- Host modulation is an exciting new treatment approach in periodontal therapy of humans and animals.
- Host modulation involves supporting the entire patient to support the body's healthy response to inflammation and oral health.

This approach is important because, while plaque is the cause of periodontal changes, it is the body's inflammatory response to plaque that ultimately leads to these changes.³

Oral health should be a significant focus in preventative health and wellness. The Veterinary Oral Health Council (VOHC) recommends annual oral exams performed by a veterinarian, daily brushing at home by the pet owner, and daily chewing activities using products that carry the VOHC seal.⁴

Additional tools are available which can complement current VOHC recommendations such as feeding a species appropriate diet rich in minerals, vitamins, and phytonutrients or feeding a veterinary prescription diet clinically proven to reduce plaque at the gum line.

A Multi-modal Approach to a Healthy Mouth

Diet and nutrition choices are foundationally important in overall health as well as for dental health. In addition to the type of diet, various nutrients can help to modulate both oral and systemic inflammation.

- The microbiome begins in the mouth and prebiotics and probiotics are gaining attention in medical research.⁵
 - Recent studies show that using probiotics both orally and topically improves oral health.⁶ Topical probiotics also help by forming healthy bacterial colonies in the mouth, which crowd out harmful bacteria.
 - Research on dogs and humans indicates that probiotics reduce the depth of periodontal pockets and improve the health of oral tissues.⁷
- Antioxidants from food-based sources such as berries and green leafy vegetables can play an important role in periodontal health and offer protective benefits.⁸
- Vitamins that have been studied in relation to periodontal health include vitamins A, B, C, and D.⁹
 - Vitamin A is important for healthy gums and mucous membranes.
 - B-complex vitamins (including folic acid, niacin, pantothenic acid, and riboflavin) are associated with healthy epithelial, gingival, and bone health.¹⁰
 - Vitamin C plays a key role in collagen synthesis
- Minerals such as calcium, magnesium, phosphorus, and manganese are critical to dental health for pets. Supporting jawbone integrity and stronger enamel is critical to oral health. Weakened enamel can be strengthened or restored to some degree by improving its mineral content.¹¹

Adjunctive Supplement Support



FEATURED PRODUCT

VF Bio-Dent® for Pets

Suggested Use: **See product label for dosing by weight**

VF Bio-Dent contains calcium, phosphorus, and manganese for support of bony structures and connective tissue in the body, including the mouth.

- Contains many of the building blocks needed to support and maintain oral and bone health
- Provides building blocks for young animals who are experiencing tooth and bone growth and development.
- Supports the health of oral connective tissues
- Provides systemic support that can help to ensure an overall healthy mouth



Feline Immune System Support

Suggested Use: **1 tablet twice a day**

Feline Immune System Support is a supplement that provides nutritional and biochemical support for healthy immune cells and tissues in cats.



Canine Immune System Support

Suggested Use: **See product label for dosing by weight**

Canine Immune System Support is a supplement that supports dogs' immune system function, endocrine health, and provides nutritional and biochemical support.



VF Omega-3 for Pets

Suggested Use: **See product label for dosing by weight**

VF Omega-3 is a fish oil supplement for dogs and cats formulated to provide omega-3 fatty acids that support pets' critical body systems. It delivers concentrated fish oil in softgel form to bridge cats' and dogs' critical body systems.



ProSynbiotic

Suggested Use: **Dosing by weight****

ProSynbiotic, a probiotic for everyday microbial support, is a synergistic blend of 4 probiotic microbes and a prebiotic fiber to support overall intestinal health.**†

Comprehensive Oral Healthy Assessment and Treatment | In Office/Physical Exam

- Full-mouth exam; note swelling and any irregularities in the teeth and gums
- Intraoral x-rays as needed to assess the health of jaw and tooth roots
- Appropriate pre-anesthetic blood work, if needed
- Discuss species-appropriate diet
- Evaluate the young animal's mouth for proper alignment, proper adult teeth growth, and loss of deciduous teeth
- Discuss the need for general anesthetic teeth cleaning
- Discuss at-home care

REFERENCES

1. Lund EM, Armstrong PJ, et al. J Am Vet Med Assoc. 214, 1336-41, 1999.
2. Berg, M. L. (2020, April 28). DVM 360.
3. Niemiec BA: Host Modulation Therapies. In: Veterinary Periodontology. Niemiec BA Ed), Jon Wiley and Sons, 299-304, 2012.
4. Veterinary Oral Health Council website.
5. Mahasneh, S. A., & Mahasneh, A. M. (2017). Dentistry journal, 5(4), 26.
6. Allaker, RP, Stephen, AS. Curr Oral Health Rep 4, 309–318 (2017).
7. Zhang, Y., Ding, Y., & Guo, Q. (2022). Frontiers in cellular and inf microbiology, 12, 806463.
8. Kaur, G., Kathariya, R., Bansal, S., Singh, A., & Shahakar, D. (2016). Journal of food and drug analysis, 24(2), 239–246.
9. Hans, M., Malik, P. K., Hans, V. M., Chug, A., & Kumar, M. (2023). Journal of oral biology and craniofacial research, 13(4), 471–475.
10. Hermann Becks, W.W. Wainwright, Agnes Fay Morgan. American Journal of Orthodontics and Oral Surgery, Volume 29, Issue 4, 1943, Pages 183-207.
11. WholisticMatters. (2021, February 17). Integrative Nutritional Support of Dental Health for Pets.
12. Naqvi AZ, Buettner C, Phillips RS, Davis RB, Mukamal KJ: J Am Diet Assoc. 110(11):1669-75, 2010.



standardprocess.com

For Vet Healthcare Professionals use only.

©2024 Standard Process Inc. All rights reserved. LN04634 08/24

† Only veterinary professionals should recommend the use of human dietary supplements for animals. This is intended to serve as a starting point for qualified veterinary professionals in making recommendations of human dietary supplements for animals. Qualified veterinary professionals are expected to apply their own professional judgment as to the appropriate use of human dietary supplements and the correct dose.

**Dosing for cats and dogs: <20 lb., ½ capsule/day | 20 - 50 lb., 1 capsule/day | >50 lb., 2 capsules/day

*These statements have not been evaluated by the Food and Drug Administration These products are not intended to diagnose, treat, cure, or prevent any disease.

**Standard
Process**
VETERINARY FORMULAS™