

# Rationale For *DentaTreat*<sup>TM</sup>

Patent Pending

At least 80% of dogs and 60% of cats have gingivitis, periodontitis, or tooth decay. Tooth health is dependant upon the outcome of a constant battle taking place in the mouth between micro-organisms, diet, minerals, tooth morphology, salivary flow, and acid-base balance.

## DENTATREAT

Canine/Feline Tooth Powder

W Y S O N G

### PURPOSE:

To aid in maintaining pet oral health, utilizing the scientifically-proven beneficial properties of cheeses, probiotics, minerals, and other natural ingredients.

### INGREDIENTS:

A special blend of Dental-Active Natural Cheeses, Trona Minerals, Calcium Lactate, Aloe Vera, Potassium Citrate, Direct Fed Microbe Cultures (*Enterococcus faecium*, *Lactobacillus acidophilus*, *bifidus*, and *salivarius*), Milk Calcium, Apple Polyphenols, Natural Enzymes, Wysong Whole Salt<sup>TM</sup>, Fructooligosaccharides, Chromium Yeast, Isolated Milk Proteins (including Lactoferrin and Lactoperoxidase).

### DIRECTIONS:

Sprinkle atop one or more meals daily, using enough to cover the food. *DentaTreat*<sup>TM</sup> can also be mixed with a small amount of water to form a paste that can be fed to your pet, or applied directly to the teeth.

For best results, use in conjunction with the entire Wysong Optimal Health Program for Animals.



### The Problem

Proper management of pet health begins with understanding the causes of potential problems. When certain foods are deposited on teeth, a microenvironment is created conducive to the formation of calculus, or plaque as it is also known. Sugars (carbohydrates) within plaque create acids that strip calcium and phosphorus from the tooth. This softens the tooth, allowing for development of cavities (dental caries). Plaque at the gum-tooth interface encourages bacterial growth, inflammation, gum recession (periodontitis), alveolar bone disintegration and tooth loss. Chronic infection in the mouth can also systemically seed infection elsewhere in the body including kidneys, blood vessels, heart and joints.

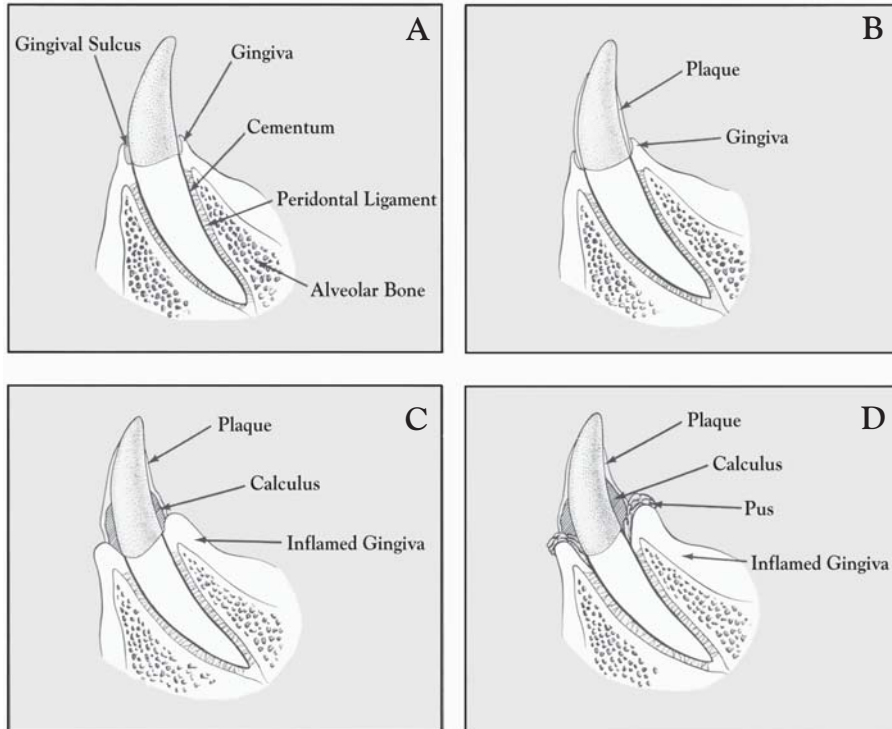
### Prevention

The basis of prevention is good nutrition. Modern pet food emphasis on processed, fractionated, refined, dead, devitalized, carbohydrate-based foods takes its toll on health in many ways. (For a full understanding of the fallacy and hazards of “100% complete” pet foods, see “The Wysong Optimal Health Program for Animals,” page 5, and [The Truth About Pet Foods](#), page 5-6.) Researchers have found that cooked starches, which are major components of processed pet foods, remain longer in the mouth, increasing the amount of time cariogenic bacteria can feed on them. Such foods also easily create sticky mouth residue regardless of their crunchy “dental preventive” design. Pets are not chewers, but rather chunk swallows and thus even if the food were filled with hundreds of tiny toothbrushes, the only effect would be a scrubbed stomach.

The Wysong Optimal Health Program advocates feeding a variety of fresh, whole foods (see page 5). This helps ensure that your pet is getting the right amounts and combinations of nutrients and textures to establish good health, both internally and externally.

Far better than any clever carbohydrate-based processed invention are the foods that have maintained animal dental health for eons. Raw bones are the perfect nutritious dentifrice and should be a part of every pet’s diet. Large beef knuckle-bones for dogs, and chicken wings and necks for cats and puppies are far superior to any fabricated food.

## PERIODONTAL DISEASE IN PETS



**A.** The healthy tooth. The tissues supporting the tooth in the alveolar socket are the gingiva, cementum, periodontal ligament, and alveolar bone. **B.** The components of plaque include mucin from saliva, exfoliated epithelial cells, food particles, and bacteria. **C.** Calculus or tartar is mineralized plaque. It is irritating to the gingival tissue. Inflammation of these tissues changes the pH of the oral cavity, facilitating the survival of pathogenic bacteria. Swollen, edematous gums serve as a nidus for infection, trapping bacteria under the gum line. **D.** The bacteria, their toxins, and neutrophils accumulate, forming a pocket of pus. This leads to detachment of the gingiva from the tooth. Figure 1.

(Caution: cooked bones can splinter, as well as cause constipation since they can easily be consumed in excess.)

### A Word about Acidemia

Modern companion animal diets have a tendency to cause systemic acidemia. This acidic environment of the body promotes the growth of disease-causing organisms, the loss of minerals from bones and teeth, and also stimulates the precipitation of tartar on the teeth. The mere fact that tartar is being deposited on the teeth is evidence that the body is too acidic. The solution is to modify the diet to its more natural, whole, raw form. This, in combination with a constant supply of pure water rejuvenated with Wysong Well-Spring™, will help alkalinize the body and promote the growth of friendly probiotics that suppress pathogens. (For a detailed discussion of systemic

acidemia and its insidious health consequences, see “Healthy Water Products.”)

### An Entirely Different Pet Snack

Wysong DentaTreat™ is an aid to maintaining pet oral health, utilizing the beneficial properties of cheeses, probiotics, minerals and other natural ingredients.

Certain **cheeses** have unique properties which help prevent tooth decay. First, the alkaline nature of these cheeses buffers the acidity of plaque and raises pH to neutralize tooth-destroying acids. Second, salivary flow is increased, thereby diluting and clearing sugars from the oral cavity. Finally, cheese proteins impede demineralization of tooth enamel and aid in remineralization, resulting in retained or regained enamel hardness.

The major **minerals** involved in tooth enamel and pulp dentin biology are calcium and phosphorus. Calcium is necessary for enamel hardness and can move into and out of tooth cells. When cheese is eaten, the salivary concentration of calcium ions available for depositing in the enamel increases, resulting in remineralization of the enamel. Phosphates also aid in remineralization by binding to the tooth surface, thereby inhibiting the binding of damaging acidic compounds.

**Trona mineral salts** have antibacterial properties and are highly effective natural agents in removing dental plaque. Trona minerals are also known to inhibit the cariogenic bacterium *Streptococcus sobrinus* by 68%. Additionally, these alkaline minerals function to neutralize acids in the mouth, thus preventing erosion. Research has shown that such salts are significantly more effective than toothpastes which contain other abrasives.

**Calcium lactate** has been shown to have plaque reducing properties and is effective in reducing demineralization and erosion.

**Probiotic cultures and enzymes** provide many internal benefits which have been described at great length in other publications (see “Wysong Probiotics and Enzymes”), and also offer benefits specific to dental health. One action is to reduce the number of putrefactive bacteria responsible for bad breath. The probiotic *Lactobacillus acidophilus* aids in optimizing calcium metabolism and produces the amino acid L-lysine, which has been linked to limiting tooth decay. DentaTreat also provides important **prebiotic oligosaccharides**, which function to nourish the beneficial active probiotics.

**Apple polyphenols** in DentaTreat prevent the attachment of *S. sobrinus* to tooth surfaces, thus inhibiting its

production of glucans and other cariogenic factors. This antibacterial function has been shown to lead to the prevention of tooth demineralization and dental caries. Polyphenols derived from apples have also been shown in clinical studies to be 2-3 times as effective as parsley seed oil in eliminating bad breath by inhibiting production of methylmercaptan by certain bacteria by up to 80%.

Wysong DentaTreat is made entirely of safe, natural food ingredients and has no artificial colorings or flavors.

Wysong DentaTreat is intended to be a delicious treat for dogs and cats, and can be fed as a treat on a daily basis. Sprinkle atop one or more meals daily, using enough to cover the food.

DentaTreat can also be mixed with a small amount of water to form a paste that can be fed to your pet, or applied directly to the teeth.

For greatest health, use in conjunction with the entire Wysong Optimal Health Program for Animals (see page 5), which includes supplements, rotating through the various diets, and whole fresh foods to provide healthy variety.

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

### Diet-Related Tooth Alignment



*Tooth alignment in a cat raised on a natural, raw meat-based diet.*



*Severe tooth malalignment in a cat raised on processed food.*

Figure 2.

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7550 Eastman Avenue  
Midland, MI 48642  
www.wysong.net  
wysong@wysong.net