



The Importance of daily dental care

Periodontal disease (PD) is one of the most common diseases seen in veterinary medicine in cats and dogs, with a **prevalence that approaches 80%**. 1,2



Daily tooth brushing is the gold standard approach to home dental care for pets; however, owner compliance is one of the biggest blockades for maintaining dental health amongst patients.

Evidence suggests that the regular feeding of specialist dental chews or prescription dental diets will contribute to the control of plaque and tartar, without the difficulties associated with manual tooth brushing. Ideally, a daily dental home care programme should be a key part of every dog owner's routine.

Not all dental sticks are made equal

The majority of dental chews work solely through mechanical action, which will assist to some degree. However, a truly effective chew will provide mechanical AND chemical modes of action against dental disease.

Bell & Bone Dental
Sticks are formulated
with industry experts
to contain two
active, chemical
ingredients Sodium
Tripolyphosphate (STPP)
and Zinc Sulphate. At
a combined amount
of 2.75% after flash
off, these ingredients
are known to prevent
and reduce plaque and
tartar when sticks are
given daily.



MECHANICAL ACTION

The texture and shape of dental diets and dental sticks encourage chewing to provide gentle abrasion on the teeth. The impact of a brushing effect can help reduce the build-up of dental plaque and calculus leading to periodontal disease.



CHEMICAL ACTION

The use of Sodium Tripolyphosphate and Zinc Sulphate in Bell & Bone Dental Sticks binds salivary calcium, reducing the build-up of calculus and reducing plaque and tartar build-up. 3,4,5,6,7



Bell & Bone Dental Sticks are moulded into a 3-pronged shape, specifically designed to encourage gnawing behaviour to increase mechanical action.

2

^{1.} Niemiec B, 2008 "Periodontal Disease." Top Companion Anim Med. 23: 72–80. doi: 10.1053/j.tcam.2008.02.003 2. Wiggs RB, Lobprise HB, 1997 "Periodontology" In:Veterinary dentistry, principals and practice: Philadelphia. Lippincott Raven. pp. 186–231.

^{3.} Hennet PH, Servet E, Venet C, 2006 "Effectiveness of an Oral Hygiene Chew to Reduce Dental Deposits in Small Breed Dogs". Journal of Veterinary Dentistry. 23 (1): 6–12. doi:10.1177/089875640602300101. PMID 16718990. 4.Hennet P, Servet E, Soulard Y, Biourge V, 2007, "Effect of pellet food size and polyphosphates in preventing calculus accumulation in dogs." Journal of Veterinary Dentistry. Dec;24(4):236-9. doi: 10.1177/089875640702400405. PMID: 18309857. 5. Shellis, RP, Addy M, Rees GD, 2005 "In vitro studies on the effect of sodium tripolyphosphate on the interactions of stain and salivary protein with hydroxyapatite". Journal of Dentistry. 33 (4): 313–324. doi:10.1016/j.jdent.2004.09.006. PMID 15781139. 6. Clarke, DE 2001. "Clinical and Microbiological Effects of Oral Zinc Ascorbate Gel in Cats". Journal of Veterinary Dentistry. 18 (4): 177–183. doi:10.1177/089875640101800401. PMID 11968899. 7. Roudebush P, Logan E, Hale FA, 2005. "Evidence-Based Veterinary Dentistry: A Systematic Review of Homecare for Prevention of Periodontal Disease in Dogs and Cats". Journal of Veterinary Dentistry. 22 (1): 6–15. doi:10.1177/0898756405022001011. PMID 15909451.



Bell & Bone dental sticks

"Bell & Bone Dental Sticks combine actives to help keep your pet's mouth healthy and clean" Dr Claire Jenkins (VetChat)



Arianne Sackville (Bell & Bone) & Dr Claire Jenkins (VetChat

Zinc compounds have been

Polyphosphates constitute a wide variety of compounds that have beneficial effects on oral health, the most effective of these being hexametaphosphates, tripolyphosphates and pyrophosphates. The efficacy of sodium tripolyphosphates in curbing the development of calculus is well known and clinically validated. Calcium (Ca2+) cations in the saliva are required for the mineralisation step by which plaque is converted into calculus, and polyphosphates work to interfere with this step. 3,4,5

THE MECHANICAL MAKEUP - Step by step

STEP 1

Polyphosphates monopolise the binding sites where calcium would otherwise attach.3

STEP 2

in the saliva in its ionic form.⁴

STEP 3

The calcium is then released normally in the digestive tract.5

clinically proven to help prevent plague accumulation due to its antimicrobial activity.6,7

Benefits

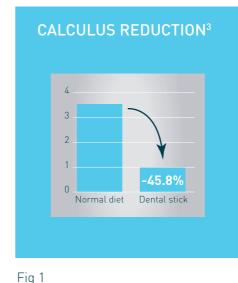
Zinc salts inhibit bacterial growth by binding to sulphur, which assists in the control of plaque formation, as well as reducing unpleasant oral odours.6,7

3. Hennet PH, Servet E, Venet C, 2006 "Effectiveness of an Oral Hygiene Chew to Reduce Dental Deposits in Small Breed Dogs". Journal of Veterinary Dentistry. 23 [1]: 6-12. doi:10.1177/089875640602300101. PMID 16718990. 4.Hennet P, Servet E, Soulard Y, Biourge V, 2007, "Effect of pellet food size and polyphosphates in preventing calculus accumulation in dogs." Journal of Veterinary Dentistry. Dec; 24(4):236-9. doi: 10.1177/089875640702400405. PMID: 18309857. 5. Shellis, RP, Addy M, Rees GD, 2005 "In vitro studies on the effect of sodium tripolyphosphate on the interactions of stain and salivary protein with hydroxyapatite". Journal of Dentistry. 33 [4]: 313–324. doi:10.1016/j.jdent.2004.09.006. PMID 15781139. 6. Clarke, DE 2001. "Clinical and Microbiological Effects of Oral Zinc Ascorbate Gel in Cats". Journal of Veterinary Dentistry. 18 (4): 177-183. doi:10.1177/089875640101800401. PMID 11968899. 7. Roudebush P. Logan E, Hale FA. 2005. "Evidence-Based Veterinary Dentistry: A Systematic Review of Homecare for Prevention of Periodontal Disease in Dogs and Cats". Journal of Veterinary Dentistry. 22 [1]: 6-15. doi:10.1177/089875640502200101. PMID 15909451.

Clinically validated actives that have proven reduction in oral health indicators

Study 1: Comparing the effectiveness of an oral hygiene chew containing STPP and zinc salts in small breed. Dogs receiving the daily oral chew had significantly less dental calculus (45.8 %) and plague accumulation (17.3 %) compared with the dogs that did not receive the chew. (Fig 1 & 2)

Study 1: Dental Chew Consumption





Study 2: Comparing the effect of polyphosphates in preventing calculus accumulation in dogs showed that dogs consuming a diet that included 0.7% STPP had on average a **55% reduction** in mouth calculus scores. (Fig 3)

Study 2: Dental Food Consumption

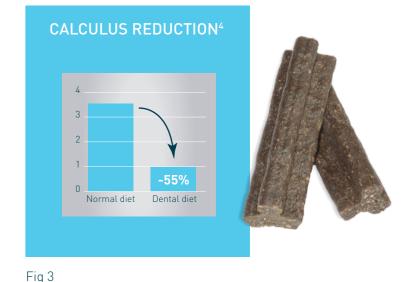


Fig 2

3. Hennet PH, Servet E, Venet C, 2006 "Effectiveness of an Oral Hygiene Chew to Reduce Dental Deposits in Small Breed Dogs". Journal of Veterinary Dentistry. 23 [1]: 6-12. doi:10.1177/089875640602300101. PMID 16718990. 4. Hennet P,

Servet E, Soulard Y, Biourge V, 2007, "Effect of pellet food size and polyphosphates in preventing calculus accumulation in dogs." Journal of Veterinary Dentistry. Dec;24(4):236-9. doi: 10.1177/089875640702400405. PMID: 18309857.



Functional superfood ingredients

Each Bell & Bone 4 flavour variants has their own unique superfood ingredient for optimal oral health.

Turmeric is a proven anti-inflammatory, antioxidant, antimicrobial, and antiseptic.8 In a 2011 study, chlorhexidine gluconate mouthwash was compared with a turmeric mouthwash. Turmeric performed as well as chlorhexidine gluconate for mean gingival index and total microbial count.9

Chia is rich in antioxidants, prebiotic fibre, omega 3s, and calcium! Bell & Bone uses chia flour in the entire Dental Range.

CHIA

Manuka Honey has anti-inflammatory and antimicrobial qualities. Studies suggest there may be a potential therapeutic role for manuka honey in the treatment of gingivitis and periodontal disease. ¹⁰ In a 2010 study, Manuka honey performed as well as chlorhexidine mouthwash, significantly reducing plaque formation. 11



KANGAROO mint & turmeric

mint & manuka honey





CHICKEN

mint & seaweed

Seaweed Ascophyllum nodosum has been clinically proven to improve dental hygiene. The study found that the consumption of edible treats containing Ascophyllum nodosum efficiently decreased plague and calculus accumulation in the investigated

Mint & Parsley - included to fight halitosis for fresh breath! The addition of mint in each dental stick is designed to assist odour control.

Charcoal is a natural tooth whitener! Charcoal can attach to tooth enamel, absorb stains from the tooth surface, and can help tooth whitening through tooth abrasion.¹³



SALMON mint & charcoal





8. Nagpal M, Sood S, 2013 "Role of curcumin in systemic and oral health: An overview." J Nat Sci Biol Med. Jan; 4(1):3-7. doi: 10.4103/0976-9668.107253. PMID: 23633828; PMCID: PMC3633300. 9. Waghmare PF, Chaudhari AU, Karhadkar VM, Jamkhande AS, 2011 "Comparative evaluation of turmeric and chlorhexidine gluconate mouthwash in prevention of plaque formation and gingivitis: a clinical and microbiological study." J Contemp Dent Pract. Jul 1;12(4):221-4. doi: 10.5005/jp-journals-10024-1038. PMID: 22186854.10. English HK, Pack AR, Molan PC, 2004 "The effects of manuka honey on plaque and gingivitis: a pilot study." J Int Acad Periodontol. Apr;6[2]:63-7. PMID: 15125017. 11. Nayak PA, Nayak UA, Mythili R, 2010 "Effect of Manuka honey, chlorhexidine gluconate and xylitol on the clinical levels of dental plaque." Contemp Clin Dent. Oct;1(4):214-7. doi: 10.4103/0976-237X.76386. PMID: 22114423; PMCID: PMC3220139.

12. Gawor J, Jank M, Jodkowska K, Klim E, Svensson UK, 2018 "Effects of Edible Treats Containing Ascophyllum nodosum on the Oral Health of Dogs: A Double-Blind, Randomized, Placebo-Controlled Single-Center Study." Front Vet Sci. Jul 27;5:168. doi: 13.3389/fvets.2018.00168. PubMed PMID: 30109236; PubMed Central PMCID: PMC6080642.13. Ghajari MF, Shamsaei M, Basandeh K, Galouyak MS, 2021 "Abrasiveness and whitening effect of charcoal-containing whitening toothpastes in permanent teeth." Dent Res J (Isfahan), Jul 19:18:51, PMID: 34497686; PMCID: PMC8404563.



Bell & Bone Dental Sticks

Suitable for different dietary requirements and health conditions:

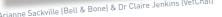


- Each Bell & Bone Dental Stick has 1 protein as the first ingredient: Kangaroo, Chicken, Lamb, Salmon
- Grain and gluten free: tapioca and sweet potato used for binding to cater to allergy prone dogs
- Hypoallergenic varieties to cater to allergy prone dogs: Kangaroo, Salmon
- Low fat to cater for weight management requirements: all flavours contain less than 2.7% fat (Kangaroo is only 1.8%)
- Low in calories to cater for weight management requirements: all flavours contain less than 282 kcal/100g



"I'm very passionate about preventative care and about making the best choices you can for your pet, which is why I'm so happy to recommend Bell & Bone." Dr Claire Jenkins (VetChat)







Dental Stick Brand Comparison

Comparing two market leading brands large size dental sticks against Bell & Bone large dental stick - Chicken flavour

Chicken Ingredient List:

Zinc Sulphate.

TYPICAL ANALYSIS

Crude Protein

Crude Fibre

Crude Fat

Metabolisable Energy (ME)

Chicken (24%), Tapioca, Sweet Potato,

Vegetable Binder, Coconut, Mint (4%),

Chia, Parsley, Vegetable Protein, Sodium

Tripolyphosphate, Mineral Salt, Acacia

Tree (gum), Antioxidant, Vegetable Oil,

Guar Gum, Seaweed Powder (1.5%),

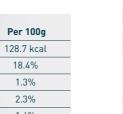
Bell & Bone Dental Sticks are Australian owned and made in Melbourne, using local high quality ingredients.











BRAND	Calories/ Stick	CRUDE fat %	CRUDE FAT% DMB	Protein inclusion	Hypoallergienic Option	Australia Made	Gluten/Grain free option
Leading Competitor A	128.2	2.55%	2.97%	Yes	No	No	No
Leading Competitor B	145	5.5%	8.24%	No	Yes	No	No
Bell and Bone	93.1	2.3%	2.67%	Yes	Yes	Yes	Yes



About Bell & Bone

Bell & Bone is a brand with uncompromising values. Built on these two principles, the Founder and Owner Arianne is determined to make a much-needed positive impact on the pet food industry.



Bell & Bone creates purposeful chews with a natural and healthy ingredient list in the aim of giving dogs a healthier and happier life.

Transparency is integral to this philosophy. Bell & Bone exists to empower, educate and support pet owners committed to raising healthy and happy pups.

Today, we look for solutions that give our pets the best chance at a long and healthy life. We choose functional ingredients with high nutritional value, and look for quality over convenience wherever possible.



VALUE 2

Through our partnership with RSPCA Victoria, Bell & Bone is committed to helping end animal cruelty and finding all dogs their forever home.

We donate 10c from each bag sold in Australia to their shelter, match all donations made on our website and provide food and treats for their shelters. Bell & Bone is committed to giving back, supporting animal welfare with RSPCA Victoria.



Bell & Bone Product Range

7 sticks per bag... one for each day of the week!







MEDIUM



LARGE



"I'm very passionate about preventative care and about making the best choices you can for your pet, which is why I'm so happy to recommend Bell & Bone"

Dr Claire Jenkins (VetChat)

KANGAR00, mint & turmeric



LAMB mint & manuka honey



CHICKEN mint & seaweed



SALMON mint & charcoal





Bell & Bone 5 star customer reviews

Dental Sticks







Best Product In The Market

though it's salmon in flavour.

Larry our Labradoodle will not have

anything else - vets and groomers always

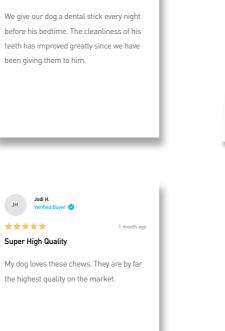
praise his teeth and gums on how healthy

- can I add his breath smells amazing even

they are no doubt it's becuase of this product

some teeth but has no problem.

The vet is very pleased with her oral health since using this product.









Excellent new dental treat

I was looking for a replacement for greenies and these were the highest reviewed I could find. The girls weren't sure about the kangaroo at first (it's pretty polarising) buth they've taken to all of the varieties now and look for their post dinner treat. It also seems to be heping the older one's breath which-despite both having excellent teeth - has always been a bit more whiffy.

Down the Hatch

Maddi has tried all of them and loves them. She particularly loves them with coconut oil smeared on each stick as you suggested. I have noticed a slight decrease in her breath smell after a week using them. Love that the sticks are soft too. Xxx Maddi the Border Terrier ****

Dental Treats Bundle

Willow, my German Shepard x Alaskan Malamute absolutely loves these treats. Thank you for making a natural product for dogs and love the fact it's an Australian owned company. Cheers Jacki ps.... I used the selfie stick you gave mor for the photo.







These are great

My dog loves these treats, I get them for her as they are not like some of the crap you buy from the pet stores and they are Australian made. I have a subscription for these and I just keep them coming. I just wish you could buy in bulk!

Loved them!

I wasn't sure if my dog would enjoy tumeric and mint flavour but he loves it!!!! He just wants to scoff them down. Would purchase again!

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Bell & Bone research into innovative dental care solutions

Bell & Bone is working with leading vet scientists, clinical formulators, pet nutritionists and food technologists to develop innovative products for the at-home dental care market.

We are committing to helping owners make educated decisions about dental care for their pets whilst providing convenient solutions to encourage at home compliance.

We believe that our commitment to improving the dental health of pets will improve their overall health and well-being forever.



Arianne and Louie

Bell & Bone Dental Sticks are proudly Vet endorsed by Dr Claire Jenkins, founder of VetChat

Go to VetChat.com.au for online vet support

- · Access Vets when yours is unavailable
- · Get clarity on urgency and next steps
- · Peace of mind that you know what to do
- · Expert advice and triage within minutes





Dr Claire Jenkins VetChat Founder & CEO, BVSc (Hons), MANZCVS (SAM)



A dental chew everyday keeps the plaque away









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1. Niemiec B, 2008 "Periodontal Disease." Top Companion Anim Med. 23: 72–80. doi: 10.1053/j.tcam.2008.02.003 2. Wiggs RB, Lobprise HB, 1997 "Periodontology" In:Veterinary dentistry, principals and practice. Philadelphia, Lippincott Raven. pp. 186–231. 3. Hennet PH, Servet E, Venet C, 2006 "Effectiveness of an Oral Hygiene Chew to Reduce Dental Deposits in Small Breed Dogs". Journal of Veterinary Dentistry. 23 [1]: 6–12. doi:10.1177/08987564062300101. PMID 16718990. 4. Hennet P, Servet E, Soulard Y, Biourge V, 2007, "Effect of pellet food size and polyphosphates in preventing calculus accumulation in dogs." Journal of Veterinary Dentistry. Dec;24[4]:236-9. doi: 10.1177/089875640702400405. PMID: 18309857. 5. Shellis, RP, Addy M, Rees GD, 2005 "In vitro studies on the effect of sodium tripolyphosphate on the interactions of stain and salivary protein with hydroxyapatite". Journal of Dentistry, 33 [4]: 313–324. doi:10.1016/j.jdent.2004.09.006. PMID 15781139. 6. Clarke, DE 2001. "Clinical and Microbiological Effects of Oral Zinc Ascorbate Gel in Cats". Journal of Veterinary Dentistry. 18 [4]: 177–183. doi:10.1177/089875640101800401. PMID 11968899. 7. Roudebush P, Logan E, Hale FA, 2005. "Evidence-Based Veterinary Dentistry: A Systematic Review of Homecare for Prevention of Periodontal Disease in Dogs and Cats". Journal of Veterinary Dentistry. 22 [1]: 6–15. doi:10.1177/089875640502200101. PMID 15909451. 8. Nagpal M, Sood S, 2013 "Role of curcumin in systemic and oral health: An overview." J Nat Sci Biol Med. Jan;4[1]:3-7. doi: 10.4103/0976-9668.107253. PMID: 23633828; PMCID: PMC3633300. 9. Waghmare PF, Chaudhari AU, Karhadkar VM, Jamkhande AS, 2011 "Comparative evaluation of turmeric and chlorhexidine gluconate mouthwash in prevention of plaque formation and gingivitis: a clinical and microbiological study." J Contemp Dent Pract. Jul 1;12[4]:221-4. doi: 10.5005/jp-journals-10024-1038. PMID: 22186854. 10. English HK, Pack AR, Molan PC, 2004 "The effects of manuka honey on plaque and gingivitis: a pilot study." J Int