

Study Shows Positive Results for Kalzyme® Dental Spray

An independent blinded study¹, “[The Effect of Enzyme Treatment on Canine Oral Health](#),” conducted at the Swedish University of Agricultural Sciences (SLU) in Uppsala, demonstrates a statistically significant reduction in gingivitis when using Kalzyme® Dental Spray.

The majority of dogs over the age of three suffer from periodontal disease, which includes gingivitis (gum inflammation) and periodontitis (tooth loss). The underlying cause is plaque, a bacterial biofilm on the teeth primarily caused by the lack of daily oral hygiene. Many dog owners find it difficult to brush their dogs' teeth, often due to the dog's discomfort or resistance. Another contributing factor is the owner's limited awareness of the importance of canine oral health.

The study included a treatment group and a control group. The treatment group consisted of twelve beagles, while ten additional beagles were included in the control group. Over a period of 26 days, the treatment group received the dental spray twice daily, morning and evening. During the same period, the control group received no treatment. The user-friendliness of the product was assessed by documenting the dogs' reactions and the users' experiences with the spray.

Each dog's oral health was examined before and after the treatment period by a veterinarian who was blinded to group assignments. The evaluation included documentation of gingivitis, plaque, tartar (scale 0–3), and thiol concentration (scale 0–5), which is directly linked to periodontal disease. After the treatment period, the results from the initial and final examinations were compared.

The findings showed a statistically significant reduction in gingivitis in the treatment group, from 1.16 to 0.75 ($p=0.008$). In contrast, the control group experienced a statistically significant increase in tartar buildup (1.2 to 1.7, $p=0.007$) and thiol levels (2.3 to 3.6, $p=0.004$). The treatment group also showed a reduction in plaque levels, while plaque increased in the control group. Notably, the untreated control group exhibited a decline in oral health during the study, further reinforcing the preventive value of Kalzyme® Dental Spray.

These findings suggest that enzyme-based dental sprays can positively impact canine oral health. This can be particularly helpful for dog owners who find it challenging to brush their pets' teeth. The enzymatic spray proved effective in reducing gingivitis and was considered user-friendly for both the dog and the person applying it. The study's results may assist veterinarians and veterinary nurses in educating pet owners about oral health.

"We're incredibly pleased to once again have the product's excellence scientifically confirmed," says Michael Edelborg Christensen, CEO.

¹ "The Effect of Enzyme Treatment on Canine Oral Health
Niklasson, Alva and Nylund, Josefine, 2024. Uppsala: SLU, Faculty of Veterinary Medicine
and Animal Science

* Every care has been taken in the translation of this Press release. In the event of discrepancies, the Swedish original will supersede the English translation.

For more information, please contact:

Michael Edelborg Christensen, CEO

Phone +46 727 144 166

Email: michael.christensen@zymiq.com

About ZymIQ

ZymIQ Technology AB (publ) is a life science company headquartered in Lund, Sweden and the parent company of the ZymIQ Group. Subsidiaries include ZymIQ Biopharma AB, Sweden and ZymIQ Animal Health LLC, Virginia, USA. The company is also represented by offices in Singapore and Malaysia. ZymIQ develops, manufactures and sells innovative enzyme-based therapeutic and cosmetic products for the well-being of humans and animals. ZymIQ also conducts pioneering research on future alternatives to antibiotics to combat the global challenge of antibiotic resistance, www.zymiq.com

Attachments

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