# Tolerance and palatability of a dental drinking water additive (VET AQUADENT™ FR3SH™) containing pomegranate, erythritol and inulin, for dogs and cats

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## Overview

**Water additives are part of daily home dental care for dogs and cats, helping to control formation of plaque and calculus.**

**A new water additive containing the FR3SH™ technology for fresh breath (pomegranate, erythritol and inulin) and no xylitol or chlorhexidine (CHX) was developed and tested on dogs and cats to evaluate its safety. Its palatability was also compared to a solution containing xylitol and chlorhexidine (VET AQUADENT™).**

**The water additive with the FR3SH technology (VET AQUADENT™ FR3SH™) was found to be safe for dogs and cats and as palatable as VET AQUADENT™.**

## Material and methods

The tolerance of the water additive was evaluated during 28 days, in 22 beagle dogs and 18 cats, all adults and healthy.

- 10 dogs and 6 cats were given the recommended dose (1% v/v of drinking water),
- 8 dogs and 8 cats were given 5 times the recommended dose (5% v/v of drinking water)
- 4 dogs and 4 cats had water only, with no product (control groups).

Animals were observed daily during the acclimation phase (D-14 to D-1) and administration phase (D0 to D28).
A complete clinical examination and body weight measurement was performed once a week.
Food and water consumption were measured and feces examination performed daily from Day-14 (or Day-7) to Day 28.
Blood samples were taken at the start and at the end of the study for hematology and blood chemistry parameters analysis (Urea, creatinine, total proteins, albumin, globulin, glucose, K, Cl, Na, ALP, ALAT, ASAT).

The palatability of both solutions (with FR3SH™ technology or CHX) was tested on:

- 77 owner's dogs
- 74 owner's cats

during 7 days and compared to each other.
All animals were healthy and received the recommended amount of solution (1% v/v of drinking water).
The study was designed as a cross-over study:
all pets tested all formulas but in a different order depending on group, for 7 days for each formula with a 7-day wash-out period between formulas tested.
Water consumption, general acceptability, odor perception and other parameters were scored by owners and compared between formulas.

## Results

Tolerance of VET AQUADENT™ FR3SH™ water additive:

- Water consumption remained similar and in the physiological range during the whole study period (including the acclimation phase)

=> **No impact of VET AQUADENT™ FR3SH™ water additive on spontaneous water consumption in both dogs and cats.**

- No product-related clinical signs were observed and rectal temperature remained in the physiological range.
- No gastro-intestinal disorders were associated to the product administration.
- Aquadent™ Fresh did not affect body weight, food consumption, hematology or blood biochemistry parameters

=> **VET AQUADENT™ FR3SH™ water additive is safe for dogs and cats**

Comparison of palatability of the formula containing the FR3SH™ technology (VET AQUADENT™ FR3SH™ water additive) and the one containing xylitol and CHX (VET AQUADENT™ water additive):
No difference was found between the formulas for the:

- Number of pets completing the study till the end (92% for dogs and 80-82% for cats)
- Water consumption
- General acceptability
- Odor perception after dilution in drinking water

=> **The perception and acceptability of VET AQUADENT™ FR3SH™ water additive is similar to the one observed with VET AQUADENT™ water additive**

## Conclusion

**VET AQUADENT™ FR3SH™ water additive is safe for dogs and cats and is as well accepted as VET AQUADENT™ water additive.**

*International conference on oral health and dental medicine, Bali, Indonesia, 2018*

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