# Palatability and tolerance evaluations of a new formulation of a supplement dedicated to maintain the balance of renal function in dogs and cats (Pronefra®)

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### Overview

Pronefra® oral suspension (Virbac) is an easyto-give feed supplement dedicated to maintain the balance of renal function of dogs and cats.

It contains intestinal phosphate binders (calcium carbonate and magnesium carbonate), chitosan to bind intestinal uremic toxins and a marine oligopeptide to help maintain a balanced blood

A new formulation of Pronefra® with these main ingredients, in natural olive and coprah oils, has been developed.

The palatability and tolerance of this new formulation were tested on healthy cats and dogs and the results are presented hereafter

# **Material and methods**

- \* Animals, doses and duration:
- 40 healthy adult cats and dogs (20 of each) were included
- In each species: 4 control animals (no supplement) + 8 receiving 1x the recommended dose per day (0.25 and 0.2 ml/kg, BID in cats and dogs, respectively) + 8 receiving 5x the recommended dose, per oral route. During weekends, the dose per day was given all at once.
- 14-day acclimation phase + 28-day administration phase.
- \* Observations and measurements:
- Daily observation (for at least 1h after the supplement administration) + food consumption and stool consistency assessed daily.
- Complete clinical examination (with body weight and temperature measurements) once a week.
- Blood samples were taken on during the acclimation phase and at the end of the study for standard hematology and blood biochemistry, including SDMA.

### **Palatability**

- 83 healthy adult client-owned cats
- Supplement over the food (usual kibbles) as recommended for 7 days
- Daily food consumption compared to the usual consumption (assessed for 2 days prior to the start of the study - baseline).
- Owners assessment on the acceptability of the product

### In dogs:

- 38 healthy adult dogs
- Daily amount of supplement put on kibbles
- Assess prehension and consumption of product and food (monadic test for 10 min.).

## Results

2 Ressearch & Development - Biopharmacy department, Virbac, Carros, France 3 Non Pharma-Regulated Products Development Unit, Virbac, Carros, France

- All cats and dogs received the intended dose and remained healthy throughout the studies.
- No significant changes in rectal temperature, food consumption and body weight were observed.

(One female dog receiving the highest dose had a slight decrease of food consumption and body weight (4%) but remained in good health anyway. These effects were deemed to be related to the large volume of oil administered, probably cutting her appetite).

- No product-related clinical signs were observed
- No impact of the product on any blood parameters.
- => The new Pronefra® formulation is well tolerated by cats and dogs.

### Palatability:

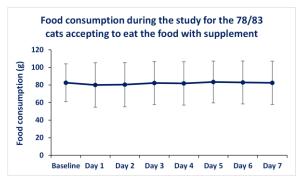
- \* In cats:
- 78/83 cats (94%) accepted to eat the food with the product on it during the whole study period
- No change in mean food consumption for these cats (see Figure).
- Mean acceptability score (89 owners) = 7.7/10 (median of 8/10)
- 72% of owners judged the palatability was good enough to give the product over 30 days.
- 75% of owners judged there was either no impact or a positive impact of the suspension on the cat's eating behavior.

Figure: mean food consumption evaluated for 2 days prior product administration and averaged to get a baseline, and with the product poured on top of the food from day 1 to 7. Data are represented as mean and SD (error bars). Only data for the cats remaining in the study during the whole study period were analyzed (78/83 cats).



- All dogs (100%) took the product,
- 84% consumed more than 95% of the product
- 92% of dogs totally consumed their kibbles

=>The new Pronefra® formulation is well accepted by cats and dogs



A new formulation of Pronefra® oral suspension, dedicated to help maintain the balance of renal function of dogs and cats, was developed in natural olive and coprah oils. The tolerance and palatability of this new formulation were evaluated.

The results showed that Pronefra® was well tolerated and well accepted by cats and dogs.



