

# BENEFITS OF A NEW ORAL GEL WITH A SOFT APPLICATOR FOR DENTAL CARE IN DOGS

## AUTHORS

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HOME CARE IS THE MOST IMPORTANT PART OF THE PREVENTION OF PERIODONTAL DISEASES. THERE ARE ACTIVE AND PASSIVE HOME CARE MODALITIES. THE PASSIVE SOLUTIONS INCLUDE DENTAL CHEWS, DENTAL DIETS, GELS OR WATER ADDITIVES

THE GOAL OF THE STUDY PRESENTED HERE WAS TO ASSESS THE EFFICACY OF THE ORAL GEL TO CONTROL THE ACCUMULATION OF PLAQUE IN DOGS.

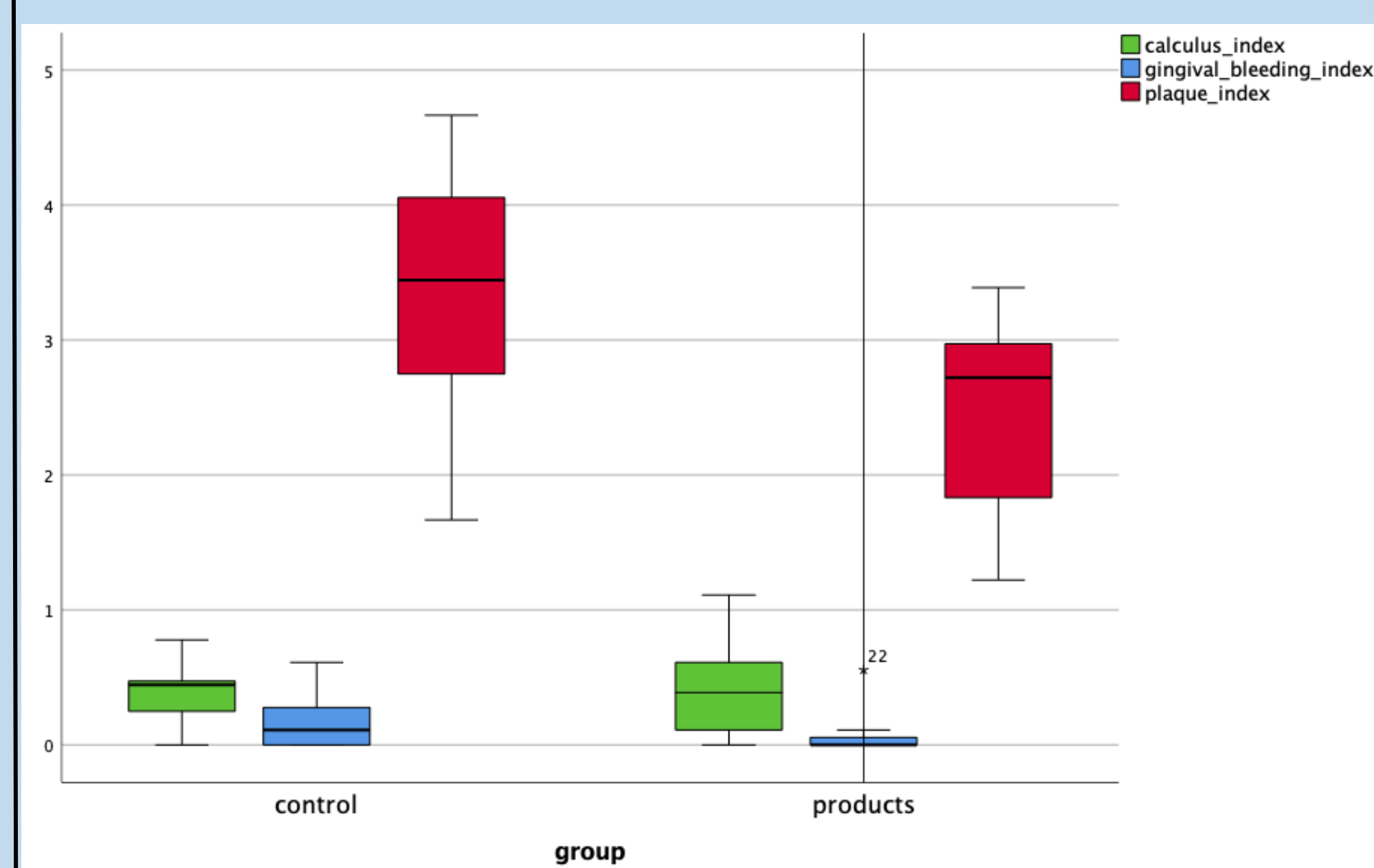
## MATERIALS AND METHODS

Thirty-two dogs weighing less than 30 kg were selected and randomly allocated to two groups of 16 dogs. After descaling on Day 0, the control group received no oral hygiene while the second group received the oral gel applied once a day according to given instructions. Gel application was performed with the use of a soft applicator without any mechanical cleaning action.

After 30 days (D30), plaque and tartar accumulations were evaluated and scored on 9 target teeth, and the average mouth scores were calculated. The Gingival Bleeding Index (GBI) was also scored (0-3) at Day 0 and Day 30 to assess the tolerance of the gel. All dogs were fed the same diet during the trial.

Due to the number of dogs (n=16 in each experimental group), Gaussian distribution of raw data was evaluated using the D-Agostino & Pearson normality test followed by a non-paired t-test for the evaluation of statistical significance between the groups at D30. The statistical significance was set at  $p < 0.05$ .

## RESULTS



At day 30, the calculus index remained at a comparable level in both groups. The difference in Plaque Index was statistically highly significant ( $p < 0.01$ ).

The GBI difference was numerically high (0.063 in the product group vs 0.17 in the control group – net difference is more than 60%), however the statistical difference was on the border of significance ( $p = 0.0572$ ).

## Study group at D30



## Control group at D30



## PRODUCT



## RESULTS

	Calculus score (mean ± SD)	Plaque Index (mean ± SD)	Gingival bleeding index (mean ± SD)
A Group (Control)	0.3815 ± 0.2056	3,326 ± 0.9875	0,1704 ± 0.06296
B Group (MP Labo product)	0.3778 ± 0.3241	2.444 ± 0.6726	0.1884 ± 0.1407
Statistical test	Parametric; unpaired t-test	Parametric; unpaired t-test	Nonparametric; U-Mann Whitney test
Statistical significance (p value)	NO; P=0.9705	YES; P=0.0080	NO; P=0.0572

## SUMMARY

- The difference in plaque and OHI( Oral Health Index) T30 is statistically highly significant ( $p < 0.01$ )
- There is no difference in calculus – both numerically and statistically
- The GBI D30 difference is highly numerically (0.063 in product group vs 0.17 in control group – so net difference is more than 60%) however statistical difference is on the border of significance ( $p = 0.0572$  whereas the border of statistical significance is  $p < 0.05$ ).
- So from the statistical point of view we can talk about strong trend ( $p < 0.07$ ) in reduction of GBI D30 in group receiving product.

## CONCLUSION

These results show that an oral application of Buccaclean® gel without brushing reduces the accumulation of dental plaque, compared to the untreated control group. Further studies are warranted to determine whether an active method of application and/or increased frequency may improve the positive influence on oral health parameters in dogs.