Tartar Shield Prevents Tartar in Cats
(Summary of Clinical Trial)

Objective

The objective of this clinical trial was to determine the effect of Tartar Shield Cat Treats on the prevention of dental calculus (tartar) in domestic cats.

Methods

This trial was designed as a two-group, matched-pair longitudinal study with parallel groups. It was conducted using 14 adult domestic, short-hair, female cats approximately 3 years of age housed in an AALAC- accredited facility within the Indiana University School of Dentistry. All animal husbandry procedures within the colony were provided in accordance with USDA, NIH and all federal regulations and guidelines. The cats were stratified into matched pairs on the basis of each cat’s amount of tartar formation during a 4-week pre-test period and the members of each pair were randomly assigned to either a test or control group. At 10:00 each morning the cats in both groups were provided a main meal consisting of a dry cat chow (Purina Cat Chow) with the daily amount determined on an individual body weight and caloric-need basis. The cats in the test group were provided 15 kiblets of Tartar Shield Cat Treats 4 hours following their main meal each day; the amount of dry chow provided as the main meal was reduced by an amount equivalent to the weight of the treats to maintain the appropriate caloric content of their diet. At baseline all the cats were anesthetized, clinically graded for calculus (for use in stratification) and given a complete dental prophylaxis to remove all exogenous tooth deposits. The 28-day study period was initiated immediately following the prophylaxes with ingestion records maintained. At the completion of the test period the cats were again anesthetized and clinically graded for the presence of calculus. Calculus grading was performed by an experienced examiner who utilized a VOHC-approved procedure in which the amount of tooth surface coverage and thickness of calculus on the buccal tooth surfaces was assessed clinically. Tooth surface coverage was scored as follows: 0 = no observable calculus; 1 = scattered calculus covering less than 25% of the tooth surface; 2 = calculus covering 25 - 49% of the tooth surface; 3 = calculus covering 50 – 74% of the tooth surface; and 4 = calculus covering more than 75% of the tooth surface. Thickness estimates of light (< 1mm), medium (1-2mm), or heavy (>2mm) were assigned values of 1, 2, and 3, respectively. Mean composite (surface coverage multiplied by thickness) scores for each tooth were obtained for each animal and subjected to statistical analyses using SAS statistical software and an analysis of variance.
Study #1431 - The Diet supplemented with Tartar Shield Cat Treats showed a **42%** reduction in the formation of dental calculus.

**Results**

The results of this study are summarized in the following table:

<table>
<thead>
<tr>
<th>Group</th>
<th>Experimental Regimen</th>
<th>Calculus Score</th>
<th>Percent Reduction</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td>Dry Chow Diet – No Treat</td>
<td>0.43</td>
<td>--------</td>
</tr>
<tr>
<td>A</td>
<td>Dry Chow Diet + Daily Treats</td>
<td>0.25</td>
<td>42%</td>
</tr>
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</table>

**Conclusions**

Daily ingestion of Tartar Shield Cat Treats reduced the formation of dental calculus in cats.