Effect of diets differing in fat content on chronic diarrhea in cats

Authors: D. Lafamme, H. Xu, G. Long
Journal: Journal of Veterinary Internal Medicine 2011; 25:230-235

Study Design

- Randomized, double-blinded, controlled clinical trial.
- 55 pet cats.
- All cats enrolled in the study had a history of chronic diarrhea – at least 3 episodes per week for at least one month. An initial baseline evaluation was performed to rule out concurrent health issues. Cats were then randomly assigned to one of two diets. Both diets were prepared using the same ingredients but the nutritional profiles were adjusted to create different fat content (10% vs 23% on a Dry Matter Basis). The fecal consistency and frequency were obtained for the subsequent six weeks.

Results

Fecal scores improved significantly in both groups (78.2% of all cats). Fecal scores began to improve within the first week, with maximum benefit by week 3. There were no statistical differences in clinical responses between the high-fat and low-fat diets. Over one third of the cats developed normal stools.

Nutritional Profile of Diets (% DM)

<table>
<thead>
<tr>
<th>Nutrient</th>
<th>Diet A</th>
<th>Diet B</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protein %</td>
<td>43.0</td>
<td>43.4</td>
</tr>
<tr>
<td>Fat %</td>
<td>23.2</td>
<td>10.5</td>
</tr>
<tr>
<td>Carbohydrate %</td>
<td>24.4</td>
<td>36.7</td>
</tr>
<tr>
<td>Fibre %</td>
<td>1.3</td>
<td>1.8</td>
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</tbody>
</table>
Evaluation of canned therapeutic diets for the management of cats with naturally occurring chronic diarrhea

Authors: D. Lafamme, H. Xu, C. Cupp, W. Kerr, Z. Ramadan and G. Long
Journal: Journal of Feline Medicine and Surgery 2012; 14 (10); 669-677

Study Design
- 16 adult cats with a history of chronic diarrhea.
- Randomized, Controlled, Cross Over study.
- All diets were canned products.
- During the baseline phase, all cats were fed the same complete and balanced maintenance diet. Cats were then assigned to one of two groups and fed either diet X (Hills® Prescription Diet i/d Feline Gastrointestinal Health®) or diet Y (PPPVD EN Gastroenteric™ Feline Formula) for four weeks and then switched to the alternate diet for an additional four weeks. Fecal scores were recorded during the last week on each diet.

Results
Both therapeutic diets resulted in a significant improvement in average Fecal Score. Diet Y also resulted in significantly better results compared with diet X. Normal stools (average fecal score ≤ 3) were achieved in 46.7% of cats fed diet Y versus 13.3% of cats fed diet X.*

Author's Conclusion
Chronic diarrhea in cats can be nutritionally managed with canned food formulated to contain high protein, low carbohydrate, moderate fibre (containing both soluble and insoluble fibre), and a source of long chain omega 3 fatty acids.

* Diet X - Hills® Prescription Diet i/d Feline Gastrointestinal Health® Formula canned
Diet Y - PPPVD EN Gastroenteric™ Feline Formula canned