



Clinical Evidence Report

For Parent Products of Prescription Diet® k/d®+Mobility Feline

GENERAL BACKGROUND

Chronic kidney disease (CKD) is a major cause of morbidity and mortality in dogs and cats.¹ Nutritional management has been the cornerstone of long-term treatment of this condition for many years and has been shown to significantly decrease CKD-related mortality in cats. There is strong evidence behind nutritional management of canine and feline CKD with Hill's® Prescription Diet® k/d®.^{2,3} While nutritional management of CKD in companion animals is effective, a large proportion of these are older pets, many of which suffer from concurrent conditions. In one recent study, at least 50% of geriatric cats suffered from CKD.⁴

Another common condition of aging cats is degenerative joint disease (DJD). A recent study found that 69% of cats with DJD also suffered from CKD.⁴ While often not clinically obvious to owners, studies have shown that 90% of cats over the age of 12 years suffer from DJD. Nutritional management with omega-3 fatty acids has proved to be effective in managing DJD in cats.⁵ Omega-3 fatty acids provide clinical benefit to cats suffering from DJD by helping control inflammation and reducing the expression and activity of cartilage proteoglycan-degrading enzymes. Nutritional management of feline DJD with Prescription Diet® j/d® has been proven to be effective at both decreasing stiffness and increasing daily activity in these patients.⁵

Chronic kidney disease and DJD are common conditions impacting the lives of our senior feline companions. In recognition of that, Hill's Pet Nutrition has developed Prescription Diet® k/d®+Mobility. k/d®+Mobility combines the nutrition of k/d® with the technology and efficacy of Prescription Diet® j/d®. k/d®+Mobility is the first renal therapeutic food to also address one of the most common comorbid conditions impacting quality of life in geriatric cats — DJD.

HILL'S EVIDENCE-BASED CLINICAL NUTRITION™

CHRONIC KIDNEY DISEASE

Clinical Evaluation of Dietary Modification for Treatment of Spontaneous Chronic Renal Disease in Cats

Ross SJ, Osborne CA, Kirk CA et al.

J Am Vet Med Assoc. 2006;229(6):949-957.

Key Points:

- Cats with CKD fed k/d® Feline experienced significantly less episodes of uremic crises during the 2-year study period compared with the cats fed the maintenance control food (0 and 26% of cats suffered uremic episodes, respectively).
- Moreover, there were significantly less CKD-related deaths in the group of cats fed k/d® Feline (0%) compared with the group of cats fed the maintenance control food (22%).

Feeding Studies Confirm Cats with Chronic Kidney Disease Eat Significantly More Calories When Fed Hill's® Prescription Diet® k/d® Feline

Fritsch D, Vanchina M, Stiers C, Jewell D.

Hill's Pet Nutrition Clinical Evidence Report 2016.

Key Points:

- Clinically shown to help improve appetite in cats with CKD through enhanced sensory appeal, stimulating up to 29.7% greater caloric intake compared with competitor renal foods.
- Up to 88% of cats with CKD preferred k/d® with Enhanced Appetite Trigger (E.A.T.)™ Technology compared with leading renal foods.

DEGENERATIVE JOINT DISEASE

An Open-Label, Prospective Study Evaluating the Response to Feeding a Veterinary Therapeutic Diet in Cats with Degenerative Joint Disease (abstr.)

Sparkes A, Debraekeleer J, Fritsch D, et al.

J Vet Intern Med. 2010;24(3):771.

Key Points:

- Based on veterinary clinician assessment as well as owner assessments, after 30 days of being fed Prescription Diet® j/d® Feline, 89% of cats with DJD demonstrated improved ability to jump, and 72% experienced reduced stiffness.
- Sixty-eight percent of cats fed j/d® Feline for 30 days exhibited increased activity, and 62% had reduced lameness. Additionally, 55% of cats with DJD fed j/d® Feline for 30 days demonstrated reduced pain on joint manipulation.

Effects of a Therapeutic Food on Clinical Measures, Cartilage Biomarkers and Metabolomic Changes in Cats with Appendicular Degenerative Joint Disease (abstr.)

Frantz N, Abrahamsen M, Mickelsen S, et al.

ACVIM Forum 2009.

Key Points:

- Cats with DJD fed j/d® Feline for 14 days exhibited plasma metabolomic changes consistent with decreases in metabolic pathways associated with inflammation and cartilage degradation. Some markers of proteoglycan and collagen degradation were also significantly decreased after 14 days.
- Compared with the control food, cats with DJD had significantly increased average daily activity levels when fed j/d® Feline.

Summary

Prescription Diet® k/d®+Mobility Feline has the nutritional attributes of Prescription Diet® k/d® Feline and j/d® Feline. This nutrition has been clinically proven to decrease renal-related mortality and uremic crises in cats with CKD, and improve ability to jump and decrease joint stiffness in cats with degenerative joint disease in as little as 28 days.

REFERENCES

- ¹ Lulich JP, Osborne CA, O'Brien TD, et al. Feline renal failure: questions, answers, questions. *Compend Cont Ed Pract Vet.* 1992;14(2):127-153.
- ² Polzin DJ. Evidence-based step-wise approach to managing chronic kidney disease in dogs and cats. *J Vet Emerg Crit Care.* 2013;23(2):205-215.
- ³ Roudebush P, Polzin DJ, Ross SJ, et al. Therapies for feline chronic kidney disease: What is the evidence? *J Feline Med Surg.* 2009;11(3):195-210.
- ⁴ Marino CL, Lascelles BD, Vaden SL, et al. Prevalence and classification of chronic kidney disease in cats randomly selected from four age groups and in cats recruited for degenerative joint disease studies. *J Feline Med Surg.* 2014;16(6):465-472.
- ⁵ Sparkes A, Debraekeleer J, Fritsch D, et al. An open-label, prospective study evaluating the response to feeding a veterinary therapeutic diet in cats with degenerative joint disease (abstr). *J Vet Intern Med.* 2010;24(3):771.