NUTRICIÓN

A HIGH-PROTEIN, LOW-CARBOHYDRATE, HIGH-FIBER FOOD FOR CATS WITH DIABETES MELLITUS

C. Farrell, D. Fritsch, K. Sixby, T. Allen, I. Paetau-Robinson, K. Hahn

Hill's Pet Nutrition, Inc.

Comunicación

Objectives of the study

Maintaining blood glucose concentrations and managing glycemic response is pivotal in diabetic patients. The objective of this study was to determine the safety of a Test Food (A) high in protein (52.6% protein, DMB), low in carbohydrate (14.2% NFE, DMB), and moderate in fiber (6.18% crude fiber, DMB) compared to a Control Food (B) with similar nutrient profile except a lower fiber level (1.08% crude fiber, DMB) in maintaining weight and glycemic control in cats with stable diabetes mellitus.

Material and Methods

The foods were tested in a randomized, double-blinded, multi-center clinical study.

Forty client-owned cats fed an assortment of typical grocery brand foods with stable, medically managed diabetes mellitus were assigned to receive either Food A or Food B for six weeks. The cats presented to the veterinarian at 0, 3, and 6 weeks post-initiation of the feeding study at which time body weight and body condition score were determined and blood was drawn for serum chemistry analysis, including glucose and fructosamine, and a complete blood count. The cat owners observed their cat daily, recorded food consumption, appetite, insulin dose, activity level, and presence of polyphagia, polyuria, or polydypsia.

Results

Of the cats that completed the study, 18 received Food A and 17 cats received Food B. The cats on either food maintained their body weight during the study.

Food B, the low-fiber food, showed a trend toward increasing serum glucose and fructosamine concentrations, whereas, these indicators remained stable with the Food A group. Based on the pet owner observations and questionnaires both foods significantly improved the cat's diabetic condition, quality of life, and hair condition.

Conclusions

Visible improvement in diabetic condition, quality of life, hair coat condition, and activity level were apparent to the cat owners in both food groups. Both feeding regimens resulted in acceptable control of circulating glucose and fructosamine concentrations. However, feeding Food B (the lower fiber food) resulted in a trend toward increased circulating glucose concentrations when compared to the moderate fiber food ($P = 0.08$ at day 21). Also, feeding Food B resulted in a slight increase in fructosamine concentration ($P = 0.09$ at day 42). We conclude that the cats receiving Food A (high protein, low carbohydrate) is safe to be fed to cats with stable diabetes mellitus.