Objectives of the study
Decreasing the number of calories fed to overweight dogs is the principal strategy for effective weight loss. Commercial foods marketed for weight management vary widely in protein, caloric and fiber content, as well as the mix of ingredients providing calories. Increasing the available amount of dietary fiber may be a benefit through voluntary consumption of less food energy. Dietary fiber has been shown to provide the gastrointestinal tract with dietary bulk that limits consumption, increases satiety, reduces digestibility of ingested energy nutrients, decreases secretion and activity of pancreatic enzymes, and reduces transit time through the small intestine. The objective of this study was to assess the effect of a low-fiber, medium fat, increased protein food (Food A) versus a high-fiber, high-carbohydrate food (Food B), when used by consumers who were given instructions to feed similar calories, on weight loss when fed to overweight and obese adult dogs.

Material and Methods
This was a randomized, double-blinded, controlled prospective 24-week clinical study of 73 client-owned overweight (BCS 4/5, n=37) and obese (BCS 5/5, n=36) adult dogs. Change in behavior, physical activity, food consumption, stool score, stool volume, and quality of life were recorded by pet owners in a weekly diary. Physical examination, body weight, and body condition assessment was performed by a veterinarian every 4 weeks or until the dog achieved a BCS of 3. Feeding guidelines were calculated on resting energy requirements to ensure safe and effective weight loss. Both foods were designed to meet the AAFCO requirements to be complete and balanced with similar vitamin and mineral nutrition.

Results
Weight reduction was significantly greater (P≤0.05) and body condition scores were significantly lower (P≤0.01) in dogs fed Food B. Dogs fed Food B lost 71% of the weight targeted for loss compared to 31% in dogs fed Food A (P≤0.01). Dogs fed Food B lost 2.4 times more weight (4.16 kg) than dogs fed Food A (1.77 kg). Dogs fed Food A had a significant increase in hunger behaviors as opposed to dogs in the group fed Food B throughout the study (P<.05). Dog owners reported a significant increase (P ≤0.01) in quality of life during the final month of the study in dogs fed Food B.

Conclusions
The comparison of feeding overweight and obese dogs these two foods showed that dogs fed Food B, had an increased quality of life, lost more weight, and reached their target weights more often and sooner than dogs fed Food A. This difference observed in “real-world” setting may be the result of changes in compliance resulting from differences between foods and the ability to reduce hunger. These compliance differences suggest value in using a diet that provides satiety and restricts calories.

Bibliography