FOCUS: Feline Medicine

Time for Kitty to Lose Weight

The most common nutritional problem found in domestic cats is obesity or excessive weight gain. Numerous medical conditions have been associated with feline obesity, including diabetes mellitus, lameness, nonallergic skin disease, lower urinary tract disease, and idiopathic hepatic lipidosis. Cats at risk include middle-aged, male, mixed-breed, and neutered cats. Research has shown that owners of overweight cats have closer relationships with their cats and were more likely to view them as substitutes for human companionship. This means that client education is imperative.

Developing weight loss programs for cats is challenging and an underutilized method of preventive medicine. Clients need to be educated on the value of properly assessing BCS (5/9 is optimal). Next, a thorough diet history must include a list of precise brands and amounts of food being fed. Clients should be advised to use either a gram scale or standard 250 mL/8 oz measuring cup and to attempt to achieve 20%-30% weight loss at a safe rate of 0.5%-2.0% body weight per week. Feeding strategies can include high-protein, high-moisture, high-fiber, or low-fat diets. Encouragement of exercise and “emotional treats” instead of food treats should be recommended.

Commentary
While many tips in this review are easier said than done, studies in dogs have shown that the incorporation of multiple techniques for weight loss can yield better results (eg, exercise and lower calorie diet and environmental enrichment), so it is feasible that the same techniques can be applied to weight loss in cats. Ultimately, caregiver philosophy on weight gain or loss may dictate success, as owner obesity commonly exists in the same households as obese pets. The importance of careful and tactful coaching while adjusting these strategies cannot be understated. Several useful resources include The Indoor Pet Initiative (indoorpet.osu.edu), Association for Pet Obesity Prevention (petobesityprevention.com), Cat Wheel Company (catwheelcompany.com), and a blog about cat wheels, including different varieties and custom-built wheels (jillyotz.blogspot.com).—Heather Troyer, DVM, DABVP, CVA

Source

Alternative Method for Measuring USG

Urine osmolality is the gold standard for measuring urine concentration in dogs; however, the equipment is expensive and the test is not widely used. Instead, concentration is typically assessed by urine-specific gravity (USG) using a refractometer. USG was measured in 235 free-catch canine urine samples using an optical analog hand-held refractometer and a digital refractometer. There was a significant difference between the 2 devices, with the optical analog refractometer consistently reading higher (mean, 1.0234) than the digital refractometer (1.0228). Readings from both refractometers (n = 50 optical, n = 40 digital) were compared with urine osmolality and showed excellent correlation with osmolality results.

Commentary
As technology advances, occasionally the gold standard test may be replaced with newer diagnostic methods. Urine osmolality is the gold standard measurement of the kidney’s urine concentrating ability, but this test has limited availability. USG has been determined to correlate well with urine osmolality, is rapid, and is easy to measure. This study showed that a newer digital method of measuring USG has excellent agreement with the traditional optical analog measurement. Despite the optical refractometer reading statistically higher than the digital method, this difference is not likely to be clinically significant. Therefore, when updating the clinic’s refractometer, these newer readings can be reliably compared with previous readings. —JD Foster, VMD

Source