

Obesity

Basics

OVERVIEW

- An excess of body fat, frequently resulting in adverse health effects
- Even a moderate excess in body fat can increase incidence of disease (known as “morbidity”) and reduce lifespan

SIGNALMENT/DESCRIPTION OF PET

Species

- Dogs
- Cats

Mean Age and Range

- All ages, with the greatest prevalence (nearly 50%) in middle-aged dogs and cats

Predominant Sex

- Most common in neutered, indoor pets

SIGNS/OBSERVED CHANGES IN THE PET

- Weight gain
- Exercise intolerance may be reported
- Excess body fat and high body condition score or BCS (estimate of weight status [under- or overweight] as compared to normal weight)

CAUSES

- Obesity is caused by an imbalance between calorie or energy intake and calorie or energy expenditure, with intake exceeding expenditure
- Neutering, decreased opportunities for activity, and age can reduce expenditure of energy
- Overfeeding of high calorie foods, frequently alternating foods, and provision of excess treats contribute to excess calorie or energy intake
- Low levels of thyroid hormone (known as “hypothyroidism”), insulin-secreting tumor (known as an “insulinoma”), or high levels of steroids produced by the adrenal glands (known as “hyperadrenocorticism” or “Cushing's syndrome”) are infrequent causes of obesity

Treatment

HEALTH CARE

- Weight loss, induced by reducing calorie intake below calorie or energy expenditure
- Successful weight loss also requires long-term maintenance of the reduced weight
- Weight loss and maintenance of reduced weight depend on changes in the way the owner feeds and interacts with the pet



- The owner should assess and monitor the body condition score (estimate of weight status [under- or overweight] as compared to normal weight) of his or her pet; your pet's veterinarian will provide information on assessing BCS

ACTIVITY

- Calorie or energy restriction results in compensatory decreases in basal energy expenditure or metabolism; increased activity helps compensate for this decrease in metabolism and provides alternate opportunities for owner-pet interactions
- Leash walking for dogs and trained cats—at least 15 minutes twice daily
- Activities such as “fetch,” interactive toys for cats, or playing with a laser light
- Food balls—built to hold treats or kibbles and randomly release them while the dog or cat plays; food used in the ball must be included as part of the daily calorie allowance

DIET

- Get written instructions regarding specific amounts to provide, using the agreed upon reducing diet (a “cup” of food refers to an 8-oz measuring cup); measure food carefully to ensure appropriate amount is being fed
- Protein—increased dietary protein facilitates loss of body fat, while minimizing loss of lean body mass (LBM), which is the metabolically active tissue—preserving LBM should help with long-term weight control by maintaining a higher resting energy requirement; protein also stimulates metabolism, increases energy expenditure, and contributes to the feeling of being full or satisfied (known as “satiety”)
- Fiber—dietary fiber provides little dietary energy, so it helps reduce total calories in the diet; fiber also stimulates intestinal metabolism and energy utilization, and contributes to the feeling of being full or satisfied (satiety)
- Other dietary factors that may aid in weight management—carnitine, compound necessary for fat metabolism; isoflavones, stimulate energy metabolism and support lean body mass
- Fat—calorie or energy dense, so low-fat diets are lower in energy
- Calories should be restricted, without excessive restriction of essential nutrients; a low-calorie therapeutic diet with an increased nutrient-to-calorie ratio is recommended for weight loss
- Amount fed should target a 1–2% loss in body weight per week; faster weight loss may increase loss of lean body mass and stimulate weight rebound once weight loss is achieved
- High moisture diets can be used to reduce calories per serving; this approach appears to be more effective for cats versus dogs, as cats tend to control their intake based on volume
- If the client is not willing to use a therapeutic diet, severe calorie restriction should be avoided; a food diary can be used to record current intake over 3–7 days—subsequently, the pet should be fed 10–20% less than it previously received
- Treats are often part of the owner-pet bond; complete avoidance of treats is a hurdle to compliance with weight loss programs—instead, offer a “treat allowance” of 10% of the daily calories and use low-calorie treats suitable for dogs or cats, as directed by your pet's veterinarian

Medications

Medications presented in this section are intended to provide general information about possible treatment. The treatment for a particular condition may evolve as medical advances are made; therefore, the medications should not be considered as all inclusive

- Dirlotapide (Slentrol, Pfizer Animal Health)—approved only for use in dogs; can cause decreased appetite sufficient to lead to weight loss; use with a diet formulated for weight loss; appetite and weight will rebound after discontinuing dirlotapide; talk to your pet's veterinarian about a feeding plan to avoid rebound weight gain
- Mitratapide has a similar mechanism of action; use limited to a single course of treatment

Follow-Up Care

PATIENT MONITORING

- Frequent communication is important during the weight management program
- Telephone call from clinic to the owner to address any minor questions and to reinforce the importance of the program

- Pet should be weighed in the clinic on a monthly basis; if needed, adjustments in food allowance guidelines should be made at this time
- Once the pet has achieved an ideal body condition score (estimate of weight status [under- or overweight] as compared to normal weight) guidelines should be provided for weight maintenance; continue to measure food, monitor BCS or body weight, and adjust food allowance as needed to maintain the goal weight

PREVENTIONS AND AVOIDANCE

- Monitor food intake, weight, and body condition score (estimate of weight status [under- or overweight] as compared to normal weight) throughout life to prevent weight gain and obesity
- Maintain a healthy diet and reduce caloric intake if pet starts gaining weight (even small weight gains of 1–2 pounds can be significant in small- and medium-size dogs and in cats)

POSSIBLE COMPLICATIONS

- Obesity leads to increased risk for diseases (such as osteoarthritis, diabetes mellitus) or shortened lifespan

Key Points

- Obesity leads to increased risk for diseases (such as osteoarthritis, diabetes mellitus) or shortened lifespan
- Weight loss and maintenance of reduced weight depend on changes in the way the owner feeds and interacts with the pet
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