



Weight Loss and Cachexia

Basics

OVERVIEW

- “Weight loss” refers to unintended loss of body weight; it is considered clinically important when it exceeds 10% of the prior stable body weight in a short time (known as “acute weight loss”) or 15% over a long time (known as “chronic weight loss”) “Cachexia” is defined as a general physical wasting and malnutrition characterized by extreme weight loss, tissue wasting, lack of appetite (known as “anorexia”), and general debilitation secondary to underlying disease that is associated with long-term (chronic) disease, cancer, heart failure, or inflammation; in addition to fat loss, pets with cachexia lose a significant amount of lean body mass (LBM), especially skeletal muscle
- Loss of LBM contributes to debilitation, including weakness, fatigue, and shortness of breath

SIGNALMENT/DESCRIPTION OF PET

Species

- Dogs
- Cats

Mean Age and Range

- More likely in aging pets

SIGNS/OBSERVED CHANGES IN THE PET

- Clinical signs in pets with weight loss may include normal, increased, decreased, or absent appetite, fever, or other signs of generalized (systemic) illness
- Historical information is extremely important—evaluate the quantity of food being offered, the pet's daily activity, environment, appetite, signs of gastrointestinal disease (such as vomiting, diarrhea, stool color/consistency, difficulty swallowing [known as “dysphagia”])
- Signs associated with an underlying disease
- Weight loss
- Low or decreasing body condition score (BCS; estimate of weight status [under- or overweight] as compared to normal weight)
- Muscle wasting

CAUSES

Dietary Causes

- Insufficient quantity of food
- Poor quality of food

- Low-calorie or low-protein diet
- Inedible food—decreased palatability
- Spoiled diets
- Diets that have lost nutrients because of prolonged storage
- Competition in a multipet household

Lack of Appetite (Anorexia)

- Pseudoanorexia or “false lack of appetite,” a condition in which the pet does not eat because it has difficulty grasping, chewing, and/or swallowing food
- Inability to smell, grasp, or chew food
- Difficulty swallowing (dysphagia)
- Nausea
- Regurgitation (return of food or other contents from the esophagus or stomach back up through the mouth)
- Vomiting

Disorders in Which Nutrients Are Not Absorbed from the Intestines (Malabsorptive Disorders)

- Infiltrative and inflammatory bowel disease
- Lymphangiectasia—dilation of the lymphatic vessels in the gastrointestinal tract; the “gastrointestinal tract” includes the stomach, small intestines, and large intestines
- Severe intestinal parasitism

Disorders in Which Nutrients Are Not Digested (Maldigestive Disorders)

- Exocrine pancreatic insufficiency—a syndrome caused by inadequate production and secretion of digestive enzymes by the pancreas

Metabolic Disorders

- Organ failure—heart failure, liver failure, and kidney failure
- Inadequate production of steroids by the adrenal glands (known as “hypoadrenocorticism” or “Addison's disease”)
- Excessive production of thyroid hormone (known as “hyperthyroidism”), especially in cats
- Extreme weight loss and muscle wasting (cachexia) due to cancer

Excessive Nutrient Loss

- Protein-losing enteropathy—condition in which proteins are lost from the body through the intestines
- Protein-losing nephropathy—condition in which proteins are lost from the body through the kidneys
- Diabetes mellitus (“sugar diabetes”)
- Extensive skin lesions (such as burns)

Disease of the Nervous System and Muscles

- Disease of the nerves that connect the spinal cord and muscles (known as “lower motor neuron disease”)
- Central nervous system (brain, spinal cord) disease—usually associated with lack of appetite (anorexia) or the pet does not eat because it has difficulty grasping, chewing, and/or swallowing food (pseudoanorexia)

Excessive Use of Calories

- Increased physical activity
- Prolonged or extreme cold environment
- Excessive levels of thyroid hormone (hyperthyroidism)
- Pregnancy or lactation
- Increased breakdown of lean muscle mass and body tissues (known as “catabolism”)—fever, infection, inflammation, cancer

Treatment

HEALTH CARE

- The most important treatment principle is to treat the underlying cause of the weight loss
- Determine caloric requirements for the pet, taking into account activity level and severity of illness

DIET

- Must provide sufficient caloric nutrition in the form of adequate amounts of an appropriate, high-quality diet—fed in the form or manner that best allows pet to obtain adequate nutrition

- Offer tasty food several times a day to increase voluntary food intake, if the pet is able and willing to eat
- Pet may need to be fed by feeding tube or through intravenous feeding (known as “parenteral nutrition”)

SURGERY

- Placement of a feeding tube may be necessary

Medications

Depend on the underlying cause of the weight loss

- Appetite stimulants may be useful on a short-term basis; examples include benzodiazepines (such as diazepam for dogs and cats, oxazepam for dogs and cats, midazolam for cats, and flurazepam for cats), propofol for dogs, and anabolic agents (such as stanozolol and boldenone)
- Megestrol acetate—alternative medication to promote appetite and weight gain
- Clenbuterol—alternative medication to increase muscle mass
- Long chain omega-3 fatty acids—to reduce inflammation

Follow-Up Care

PATIENT MONITORING

- Depends on the underlying cause of the weight loss
- Pet should be weighed regularly and frequently
- Body condition score (estimate of weight status [under- or overweight] as compared to normal weight) should be monitored regularly and frequently; your pet's veterinarian can provide information on assessing BCS
- Appetite and caloric intake should be monitored closely to ensure nutritional needs are being met

PREVENTIONS AND AVOIDANCE

- Depend on the underlying cause of the weight loss

POSSIBLE COMPLICATIONS

- Depend on the underlying cause of the weight loss
- Tube feeding and intravenous feeding (parenteral nutrition) are associated with potential complications related to the procedures

EXPECTED COURSE AND PROGNOSIS

- Depend on the underlying cause of the weight loss

Key Points

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Notes

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