



Something to Chew On!



Your Information Source on Pet Nutrition

Obesity

By Chip Coombs, D.V.M.

Obesity is one of the most common nutritional medical disorders affecting companion animals, with approximately 24-40% of pets being classified as overweight. Obesity is defined as an increase of over 20% above the optimum body weight. Reasons for this include a more confined and sedentary lifestyle for pets, availability of highly-palatable, energy dense pet foods and treats, and a strong human-animal bond which leads to overfeeding and snacking.

The fundamental cause of obesity is excess of caloric intake over energy depletion with the surplus being stored as fat. There are many factors mitigating this balance, luding age, breed, sex, hormonal abnorbities, as well as external factors such as lifestyle, diet formulation and intake.

Hound breeds, Cocker Spaniels, Labradors and Shelties are some of the more common breeds affected. Neutered females, dogs older than 4 years of age and pets belonging to obese owners are more prone to excess weight gain.

The risk of certain health problems, such as diabetes mellitus, pyometra, pancreatitis, increases with obesity, as well as an exacerbation of existing clinical disease, such as arthritis and respiratory disease. There is also a correlation between insulin resistance and obese beagles and cats, whereby there may well be a decrease or elimination of a requirement for insulin with the occurrence of weight reduction.

Weight reduction can be achieved by lowering of energy intake, coupled with correction of concurrent medical conditions. Increased exercise is critical, but can be roractical in cats or difficult due to owners' astyles. Very often behavioural modification

techniques are necessary to eliminate inappropriate behaviour such as begging. For any weight reduction program to be successful, an owner must first acknowledge that a problem exists and then be committed to its correction.

Calorie reduction in dogs can be quite dramatic, utilizing complete starvation (contraindicated in cats due to the possibility of precipitating hepatic lipidosis). This is likely to be unacceptable to owners, would require vitamin/mineral supplementation, and result in an unwanted loss in lean body mass. Moderate weight loss can be achieved by feeding 10-20% fewer calories through less volume of regular food. Restricting calories also restricts protein, vitamins and minerals. However, most pet foods contain sufficient excesses for this degree of calorie restriction.

With grossly obese pets or less dedicated owners, a more severe calorie restriction may be necessary. Diets which have a more severe restriction of calories (25% or greater) must be specially formulated and fortified to avoid nutritional imbalances. Diet restriction must be introduced cautiously in obese cats as they can often only tolerate moderate calorie restriction. Furthermore, many low calorie/weight reduction diets may be unpalatable to some cats. It is important to ensure that the cat does, in fact, eat the diet when it is first introduced.

With the aid of a number of computer programs or nutritional texts, the daily



caloric requirements of the pet can be calculated and the appropriate amount of a specific food prescribed. The principle in all therapeutic diets is to offer a reduced energy density coupled with a compensatory supplementation of protein, vitamins and minerals. A number of different formulations are used by different manufacturers and the most effective has not been established. Some foods offer a lower fat content coupled with higher levels of complex carbohydrates, which not only lowers energy density but adheres to the concept that fat is more efficiently laid down as adipose tissue than carbohydrate. Other foods which are low in fat, coupled with high levels of indigestible fibre, rely in part on an earlier feeling of satiety to limit food intake. However, stool volume and palatability may be adversely affected. Alternative bulking methods involve higher water content in canned foods and a higher air content of dry foods.

As most dogs and cats will eat to meet their daily caloric requirements, calorie restriction remains the essence of success for weight loss. Although most cases of obesity can be corrected with proper owner compliance, early client education remains the best preventative measure. Overfeeding puppies and kittens may lead to an excess production of fat cells and a propensity for being overweight later in life. In puppies, overfeeding may also accelerate the growth rate, which in certain breeds may exacerbate any predisposition to certain skeletal diseases. Young pets should be fed an appropriate daily amount of a balanced food with a caloric density that will result in normal growth rates and lean body condition. For most adult pets, avoidance of ad libitum feeding and poor behavioural habits (e.g. begging), and regular exercise will provide a successful approach to the prevention of obesity.

CVMA Pet Food Certification Program