Obesity in pets - the BSAVA position statement

Alexander J. German BVSc, PhD, CertSAM, DipECVIM-CA, SFHEA, FRVCS

**Introduction**

Overweight and Obesity in pets are ever-increasing concerns, with recent studies suggesting that over half of dogs and cats in the UK and in other countries to be affected (Courcier et al 2010a & 2010b). Particularly concerning is the recognition that current prevalence in growing animals, given the recent observation that approximately 21% of dogs are already overweight by 6 months of age (German et al, 2018). In light of this, the BSAVA has for the first time agreed a position statement, which is hoped will provide guidance to veterinary surgeons on their duties and responsibilities towards dogs and cats with obesity. In this article Professor Alex German discusses the background to the development of the position statement and its key aspects.

**Overview of the obesity position statement**

The position statement was drafted by the BSAVA Scientific Committee over the 6 months, and was the result of discussions amongst the members of the scientific committee. Like all statements, it is intended to provide guidance to members in dealing with pets affected by the condition. The key aspects of the statement include formal definitions, use of body conditions scoring, weight management, prevention, and communication. For example, the statement recommends that veterinary surgeons standardise their approach to body condition scoring and, most notably, use the 9-unit method developed by Laflamme (1997a &1997b). Whilst it is recognised that no system is perfect, the 9-unit scale has been validated most extensively and is the one recommended by the WSAVA Global Nutrition Committee(2011). With this approach, a BCS of 6 or 7 is corresponds to “overweight”, whilst a BCS of 8 or 9, corresponds to “obese”. Such standardisation will help to provide clarity and ensure consistency when obesity is discussed with clients and amongst veterinary professionals.

The position statement also makes recommendations about the use of weight management. It emphasises the fact that any such plan should comprise both a period of controlled weight loss and then subsequent weight maintenance, given the risk of weight regain (German et al 2012a, Deagle et al 2014). Whilst the standard approach to weight management at the current time involves feeding a food purpose-formulated for weight loss along with increasing physical activity, other approaches are used in humans including the use of pharmaceutical agents and bariatric surgery. At the current time, insufficient evidence exists to make recommendation on the off-label use of drugs currently licensed for weight loss in people. Further, whilst the BSAVA recognises the fact that bariatric surgery is the most effective method of weight loss in people with obesity (Courcoulas et al 2014), the fact that similar techniques have not yet been used clinically in dogs and cats mean that this approach cannot be recommended at the current time.

Two key aspects of the position statement warrant the most discussion, namely formally classifying obesity as a disease, and recommendations on the approach to communication about obesity. These are covered in the sections below.

**Defining obesity as a disease in dogs and cats**

The medical profession has debated the question of whether obesity should be classified as a disease for many years, with various arguments for and against (Kopelman 2000, Kyle et al 2016, Bray et al 2017, Mueller and Geisler 2017, Vallgarda et al 2017). Those opposed, argue that increasing adipose tissue mass as a result of an abnormal (‘obesogenic’) environment is a normal physiological response (Mueller and Geisler 2017, Vallgarda et al 2017). They further argue that excessive energy intake is the result of a poor lifestyle and/or a personal failing, making individuals suffering from obesity personally accountable for their condition. In contrast, others have highlighted the fact that the pattern of development of obesity follows that of other disease processes with one or more causal factors triggering various pathophysiological mechanisms which are thought to be responsible for the development of functional impairment, comorbidities of obesity and reduced quality of life. Further, obesity possesses the characteristics required for formal definition as a disease, such as those created by the American Medical Association definition of disease (American Medical Association Hours of Delegates 2013):

1. An impairment of the normal functioning of some aspect of the body
2. Demonstrates characteristic signs or symptoms
3. Causes harm or morbidity.

Thus, most national and international health organisations, including World Health Organization, National Institute of Health, and World Obesity Federation, have now formally defined human obesity as a disease. In the UK, the Royal College of Physicians (2019) also recently also agreed on a similar formal definition.

In pets, a growing body of scientific data also support formal classification of obesity as a disease. In dogs, overweight status is associated with a shorter median lifespan(Kealy et al 2002, Salt et al 2018), poorer quality of life (German et al 2012b),comorbidities (Lund et al 2006), metabolic derangements (German et al 2009, Tvarijonaviciute et al 2012a), and significant functional impairment (including alterations in cardiovascular, respiratory, and renal function) (Mosing et al 2013, Tvarijonaviciute et al 2013, Tropf et al 2017). In cats, overweight status is also associated with comorbidities (Scarlett and Donoghue 1998; Lund et al 2005; Teng et al 2018a) and metabolic derangements (Tvarijonaviciute et al 2012b), but only a BCS of 9 is associated with a shorter lifespan (Teng et al 2018b). Obesity is further complicated by the fact that companion animals are unable to make diet and feeding choices, eliminating the complicating factor of personal accountability. Further, overweight and obesity in pets create a significant financial burden on owners, with one recent estimate suggesting a 17-53% increase in healthcare spend compared with owners of dogs and cats in optimal body condition (Bomberg et al 2017).

As a result, the BSAVA, along with 21 other national and international veterinary and related organisations formally endorsed a statement defining canine and feline obesity as a disease (Global Pet Obesity Initiative 2018). This is intended to be a positive step that both recognises the challenges face by owners with the condition and also encourages veterinary surgeons to be more proactive in supporting owners to address it. It is also hoped that this will encourage veterinary-related industries to invest in developing innovative and creative solutions for this prevalent condition.

**Advice about communicating with owners about obesity in pets**

A further aspect of the position statement approved by the BSAVA is that veterinary surgeons consider how they communicate about obesity to pet owners and, particularly, to communicate sensitively in a non-stigmatising way. Individuals with particular conditions suffer from so-called “disease stigma when someone is blamed for their illnesses because they are viewed as immoral, unclean, or lazy (Puhl and Heuer 2010). With most diseases, society tends to assign responsibility and blame such that, depending upon the particular condition, affected individuals are either considered to be victims or perpetrators (Herek et al 2003). The prevailing opinion in society is that people who have obesity are personally responsible for their weight problems because of laziness and overeating (Lawrence 2004, Kim and Willis 2007). Such assumptions provide the foundation for “weight stigma”, which is prevalent throughout society including amongst health care professionals (Puhl and Heuer 2010). People with obesity are subjected to prejudice and ridicule in many aspects of their life (Puhl and Heuer 2010), which many in society regard as both acceptable and necessary, by acting as an incentive for weight loss (Weiner et al 1988; Crandall and Biernat 1990; Puhl and Brownell 2003). Such opinions persist despite the evidence that obesity is a complex chronic disease with multiple risk factors beyond the control of the individual. For instance, recent studies have identified that most of the risk of obesity is in fact genetically determined (Riveros-McKay et al 2019). Not only does this stigma negatively influence health in patients with obesity (Sutin et al 2015), it can interfere with access often adversely affect access to healthcare (Mitchell et al 2008).

Although there has been limited veterinary research on the issue of weight stigma, the majority of veterinary surgeons believe that the most important influence on the development of obesity in pets are “owner-related” factors (Bland et al 2010; Cains-Haylor and Fordyce 2017). As in the human field, these opinion are at odds with the fact that multiple risk factors have been identified for obesity (German 2016) including genetic factors (Raffan et al 2016). Also like with human obesity, there is a gap between the number of affected animals and the number that are treated; indeed, despite the fact that the combined prevalence of overweight and obesity in the UK is estimated to be over 50% (Courcier et al 2010a & 2010b, German et al 2018), very few are recorded as overweight or obese in the clinical records (Rolph et al 2014). As a result, the proportion that are actually treated is likely to be far lower. This highlights the fact that veterinary surgeons are reluctant to hold conversations with owners about obesity, as confirmed in previous studies (Cains-Haylor and Fordyce 2017, Phillips et al). Thus, as in the human field, many affected individuals are not getting the care that they need.

In its position statement, the BSAVA encourages veterinary surgeons to hold more conversations with owners about weight status and obesity in pets. Given the weight stigma that is commonplace in society, it is recommended that these conversations be supportive and non-judgemental, using empathic, use non-stigmatising terms. It is hoped that holding more conversations facilitate the access of pets with obesity to weight management.

**Prevention of obesity**

A final aspect of the BSAVA position statement on obesity is the recommendation that veterinary surgeons consider focusing more on prevention of disease, not least given an increasing prevalence (Banfield® Pet Hospitals 2014). The BSAVA recognises this in their position statement, emphasising the need for veterinary surgeons to focus on prevention of obesity as well as management. In one recent study, 21% of dogs under 6 months of age were already identified to be in overweight condition (German et al 2018). These results mirror the increasing prevalence of obesity in children, and are particularly concerning in light of the fact that overweight condition during the growth phase is associated with the risk of obesity later in life (Reilly et al 2005; Serisier et al 2013). Therefore, for effective obesity prevention, strategies should begin early in life, ideally at the time of the initial vaccination course. One such strategy would be to monitor bodyweight and BCS should be considered from 12 weeks’ of age onwards, and this can be facilitated by the use of growth charts, which have been developed for puppies (Salt et al, 2017), and can be used free of charge by veterinary professionals ( <https://www.waltham.com/resources/puppy-growth-charts/>).

During adulthood, weight and BCS checks should be conducted at least once a year, but more frequently if possible, e.g. every 6 months during the majority of adult life, but 3-monthly during the senior phase (German, 2016). Current bodyweight can be compared with historical weight (for example an early-adult weight when the dog or cat was also recorded as being in ideal body condition), with deviations of 5% or more being flagged, and prompting. Such a strategy would highlight unwanted weight gain, which can be often addressed through adjustments to diet and exercise. The type of food fed is a matter of choice but should, ideally, should ideally be complete and balanced, appropriate for the life stage and lifestyle. The amount fed should be measured accurately (e.g. using electronic scales) and adjusted according to changes in bodyweight and BCS.

**Conclusion**

Obesity is a very common medical disease in dogs and cats, and veterinary surgeons should play their part in addressing it. It is hoped that the BSAVA position statement on obesity in dogs and cats will help to provide some initial guidance on priorities of veterinary surgeons in tackling this prevalent health and welfare concern.

**References**

American Medical Association House of Delegates (2013). Recognition of obesity as a disease. Resolution 420 (A-13). <https://www.npr.org/documents/2013/jun/ama-resolution-obesity.pdf?t=1544195051473>. Accessed 17 February 2019.

BANFIELD® Pet Hospitals (2018). Obesity in dogs and cats – state of pet health report. In: Obesity in dogs and cats – state of pet health report. Available at: <https://www.banfield.com/state-of-pet-health/obesity>. Accessed March 16, 2018.

Bland IM, Guthrie-Jones A, Taylor RD, et al (2010). Dog obesity: owner attitudes and behaviour. Prev Vet Med 92, 333-340.

Bomberg E, Birch L, Endenburg E, et al (2017). The financial costs, behaviour and psychology of obesity: a one health analysis. *J Comp Pathol* 156, 310-325.

Bray GA, Kim KK, Wilding J (2017). Obesity: a chronic relapsing progressive disease process. A position statement of the World Obesity Federation. Obesity Rev 18, 15-723.

Cains-Haylor T, Fordyce P (2017). Mapping discussion of canine obesity between veterinary surgeons and dog owners: a provisional study. Vet Rec 180, 149.

Courcier EA, Thompson RM, Mellor DJ (2010a). An epidemiological study of environmental factors associated with canine obesity. J Small Anim Pract 51, 362-367.

Courcier EA, O’Higgins R, Mellor DJ, et al (2010b). Prevalence and risk factors for feline obesity in a first opinion practice in Glasgow, Scotland. J Feline Med Surg 12, 746-753.

Courcoulas AP, Yanovski SZ, Bonds D, et al (2014). Long-term outcomes of bariatric surgery: a National Institutes of Health symposium. JAMA Surg 149, 1323-1329.

Crandall CS, Biernat M (1990). The ideology of anti-fat attitudes. J Appl Soc Psychol 20, 227-243.

Deagle G, Holden SL, Biourge V, et al (2014). Long-term follow-up after weight management in obese cats. J Nutr Sci. 3, e25.

German AJ, Hervera M, Hunter L, et al (2009). Insulin Resistance and Reduction in Plasma Inflammatory Adipokines After Weight Loss in Obese Dogs. Domest Anim Endocrinol 37, 214-226.

German AJ, Holden SL, Morris PJ, et al. (2012a). Long-term follow-up after weight management in obese dogs: The role of diet in preventing regain. Vet J. 192, 65-70.

German AJ, Holden SL, Wiseman-Orr, ML, et al (2012b). Quality of life is reduced in obese dogs but improves after successful weight loss. Vet J 192. 428-434.

German AJ (2016). Obesity prevention and weight maintenance after loss. Veterinary Clinics of North America: small animal practice 416, 913-929.

German AJ, Woods GRT, Holden SL, et al (2018). Dangerous trends in pet obesity. Vet Rec 182, 25.

Global Pet Obesity Initiative (2018). https://static1.squarespace.com/static/597c71d3e58c621d06830e3f/t/5c1a6d7403ce64fa6be7b5f8/1545235828468/Global+pet+obesity+initiative+position+statement\_FINAL.pdf. Accessed 16 February 2019.

Herek GM, Capitanio JP, Widaman KF (2003). Stigma, social risk, and health policy: public attitudes toward HIV surveillance policies and the social construction of illness. Health Psychol 22, 533-540.

Kealy RD, Lawler DF, Ballam JM, et al (2002). Effects of diet restriction on life span and age-related changes in dogs. J Am Vet Med Assoc 220; 1315-1320.

Kim S-H, Willis LA (2007). Talking about obesity: news framing of who is responsible for causing and fixing the problem. J Health Commun 12, 359-376.

Lawrence RG (2004). Framing obesity: the evolution of news discourse on a public health issue. Int J Press Politics 9, 56-75.

Kopelman PG (2000). Obesity as a medical problem. Nature 404, 635-643.

Kyle TK, Dhurandhar EJ, Allison DB (2016). Regarding obesity as a disease. Endocrinol Metab Clin N Am 45, 511–520.

Laflamme D (1997a). Development and validation of a body condition score system for dogs. Canine Pract 22, 10-15.

Laflamme D (1997b). Development and validation of a body condition score system for cats. Feline Pract25, 13-18.

Lund EM, Armstrong PJ, Kirk CA, et al (2005). Prevalence and risk factors for obesity in adult cats from private US veterinary practices. *Intern J Appl Res Vet Med* 3, 88-96.

Lund EM, Armstrong PJ, Kirk CA, et al (2006). Prevalence and risk factors for obesity in adult dogs from private US veterinary practices. *Int J Appl Res Vet Med* 4, 177-186.

Mitchell RS, Padwal RS, Chuck AW, et al (2008). Cancer screening among the overweight and obese in Canada. Am J Prev Med 35, 127-132.

Mosing M, German AJ, Holden SL, et al (2013). Oxygenation and ventilation characteristics in obese sedated dogs before and after weight loss: A clinical trial. Vet J 198, 367-371.

Muller MJ, Geisler C (2017). Defining obesity as a disease. Eur J Clin Nutr 71, 1256-1258.

Philips AM, Coe JB, Rock MJ, et al (2017). Feline obesity in veterinary medicine: insights from a thematic analysis of communication in practice. Front Vet Sci 4, 117.

Puhl R, Brownell KD (2003). Ways of coping with obesity stigma: conceptual review and analysis. Eat Behav 4, 53-78.

Puhl RM, Heuer CA (2010). Obesity stigma: important considerations for public health. Am J Public Health 100, 1019-1028.

Raffan E, Dennis RJ, O’Donovan CJ, et al (2016). A deletion in the canine POMC gene is associated with weight and appetite in obesity-prone Labrador retriever dogs. Cell Metabolism 23, 893-900.

Reilly JJ, Armstrong J, Dorosty AR, et al (2005). Early life risk factors for obesity in childhood: cohort study. BMJ 330, 1357.

Riveros-McKay F, Mistry V, Bounds R, et al (2019). Genetic architecture of human thinness compared to severe obesity. PLoS Genet 15, e1007603.

Rolph NC, Noble PJM, German AJ (2014). How often do primary care veterinarians record the overweight status of dogs? J Nutr Sci 3, e58.

Royal College of Physicians (2019). https://www.rcplondon.ac.uk/projects/outputs/what-rcp-thinks-about-obesity. Accessed !6 February 2019.

Salt C, Morris PJ, German AJ, et al (2017). Growth standard charts for monitoring bodyweight in dogs of different sizes. PLoS ONE 12, e0182064.

Salt C, Morris PJ, Wilson D, et al (2018). Association between life span and body condition in neutered client‐owned dogs. J Vet Intern Med. 2018; 33, 89-99.

Scarlett JM, Donoghue S (1998). Associations between body condition and disease in cats. J Am Vet Med Assoc 212, 1725-1731.

Serisier S, Feugier A, Venet C, et al (2013). Faster growth rate in ad libitum-fed cats: a risk factor predicting the likelihood of becoming overweight during adulthood. J Nutr Sci 2, e11.

Sutin AR, Stephan Y, Terracciano A (2015). Weight discrimination and risk of mortality. Psychol Sci 26, 1803-1811.

Teng KT, McGreevy PD, Toribio JALML, et al (2018a). Associations of body condition score with health conditions related to overweight and obesity in cats. J Sm Anim Pract 59, 603-615.

Teng KT, McGreevy PD, Toribio JALML, et al (2018b). Strong associations of nine-point body condition scoring with survival and lifespan in cats. J Fel Med Surg 20,1110-1118.

Tropf M, Nelson OL, Lee PM, Weng HY (2017). Cardiac and metabolic variables in obese dogs. J Vet Intern Med 31, 1000-1007.

Tvarijonaviciute A, Ceron JJ, Holden SL, et al (2012a). Obesity-related metabolic dysfunction in dogs: a comparison with human metabolic syndrome. BMC Vet Res 8, 147.

Tvarijonaviciute A, Ceron JJ, Holden SL, et al (2013). Effect of weight loss in obese dogs on indicators of Renal function or disease. J Vet Intern Med 27, 31-38.

Tvarijonaviciute A, Ceron JJ, Holden SL, et al (2012b). Effects of weight loss in obese cats on biochemical analytes relating to inflammation and glucose homeostasis. Domest Anim Endocrinol 42, 129-141.

Vallgarda S, Nielsen MEJ, Hansen AKK, et al (2017). Should Europe follow the US and declare obesity a disease?: a discussion of the so-called utilitarian argument. Eur J Clin Nutr 71, 1263-1267.

Weiner B, Perry RP, Magnusson J (1988). An attributional analysis of reactions to stigmas. J Pers Soc Psychol 55, 738-748.

WSAVA Global Nutrition Committee (2011) WSAVA global nutrition guidelines. Available at: http://www.wsava.org/WSAVA/media/Documents/Guidelines/WSAVA-Global-Nutritional-Assessment-Guidelines-2011-final.pdf. Accessed February 17, 2019.