Obesity in Domestic Cats on the Rise

A discussion of human factors involved in the high prevalence of obesity in domestic cats.

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Introduction

The incidence of obesity in domestic cats has been on the rise over the past 40 years, becoming a highly prevalent condition in contemporary veterinary practice (Prahl *et al*., 2007). One study conducted by O'Neill *et al*., (2014) reports it as the third most commonly seen disorder, with 6.7% of cats believed to be afflicted. Other studies have reported that as many as 58% of cats may be affected (Rodan & Ellis, 2013). Although definitions may vary, the term obese is generally used to describe an animal that is 20% or more, over its optimal bodyweight (Linder & Mueller, 2014). As it is in humans, obesity in cats is a serious welfare issue, predisposing them to diseases such as diabetes, osteoarthritis, endocrine disease and insulin resistance, as well as reducing their overall quality of life (Linder & Mueller, 2014). There is increasing evidence that this rise in obesity may parallel the human obesity epidemic and be driven by a number of factors, including individual owner beliefs regarding the health of their cat, the human-animal bond and a link between human parenting styles and cat-ownership styles (Linder & Mueller, 2014; Sandoe *et al*., 2014; German, 2014).

Discussion

One theory explaining the emergent parallel between human and feline obesity is the idea that owners may project their own health and lifestyle beliefs onto their pets (Sandoe *et al*., 2014). Just as having obese parents increases the risk of obesity in children, high proportions of obese cats have obese owners (Danielzik *et al*., 2004; German, 2014). There is consensus across the literature that among owners of obese cats there appears to be a trend of misconception/underestimating their cat's body condition score (BCS) and weight (Linder & Mueller, 2014; Sandoe *et al*., 2014; German 2014). This may simply be due to a lack of knowledge regarding condition scoring and healthy weight ranges in cats. Indeed, owners from a disadvantaged socioeconomic environment, who are at higher risk of being obese themselves, often lack information regarding the health risks of obesity (Linder & Mueller, 2014; Danielzik *et al*., 2004). It may also be due to a subconscious move on the owner's part to "normalise" both their own weight and that of their cat (German, 2014).

Conversely, Corbee (2014) suggests that such a projection of owner ideals onto their cats may lead to obesity through the aim to produce show cats that perfectly represent the breed standards set by humans. While there is an overall lower incidence of obesity in show cats, there is a relatively higher incidence in breeds described as chubby, cobby and sturdy than in breeds described as lithe and fine boned (Corbee, 2014).

Another theory that explores the link between human and feline obesity is the idea that owners may use their cats as substitutes for human company, or even children, and seek to strengthen the human-animal bond through excessive feeding (German, 2014). Sandoe *et al*. (2014) describe a study performed by Kienzle *et al*. (1998), which identifies links between using cats as human substitutes and an increased prevalence of obesity in these animals. Often owners who are seeking consolation and encouragement demonstrate increased emotional dependency on a cat they have acquired (Sandoe *et al*., 2014; Linder & Mueller, 2014) as a kind of human substitute. There is consensus between both German (2014) and Sandoe *et al*. (2014) that owners demonstrating these substitution behaviours tend to over-humanise their animals and use feeding as a means of strengthening the human-animal bond in order to elicit perceived affection from their cats. In turn, their cats learn that affectionate behaviours, such as vocalisation and rubbing, will result in food rewards, leading to a vicious cycle of overfeeding and the resultant weight gain (German, 2014).

Another concept presented in the literature is the concern that human parenting styles may correlate with ownership styles, especially in those owners who use their cats as human substitutes (German, 2014). There are four major parenting styles recognised in humans: authoritative, authoritarian, indulgent and uninvolved (Maccoby & Martin, 1983). When applied to cat ownership behaviours, the indulgent style, which involves loving and supporting your dependant but providing little structure, is speculated by German (2014) to be the most likely behaviour to contribute to obesity in cats. Such behaviour may lead to overfeeding or *ad libitum* feeding resulting in weight gain in the cats.

However, while acknowledging the amplifying impact the human-animal bond and human obesity epidemic may have on feline obesity, Linder & Mueller (2014) suggest that this detrimental effect could be reversed to help implement weight-loss regimes in obese cats. There is consensus that cat obesity may be linked to inability of owners to correctly assess body condition score and/or recognise obesity in their cats, as well as a desire to strengthen the human-animal bond via food rewards. Linder & Mueller (2014) recognise these factors while advocating an education program designed to help owners assess body condition correctly and successfully implement weight-loss strategies for their cats. Both Linder & Mueller (2014) and German (2014) emphasise the role of veterinarians in helping to mediate and advise upon such education strategies. There is evidence that veterinarians may be reluctant to discuss obesity issues with clients, the issue being raised during only 1.4% of consults, further highlighting the need for active veterinary involvement to help reduce feline obesity (Rolph *et al*., 2014). Indeed a recent study has been carried out to establish a more accurate means of evaluating body condition score using dual-energy x-ray absorptiometry that can be used correctly by both veterinary professionals and owners (Shoveller *et al*., 2014).

Conclusion

There appears to be a tangible link between the human obesity epidemic and rising obesity among domestic cats. It seems to be driven by several factors, including individual owner lifestyles, the human-animal bond, and the use of cats as human/child substitutes. Given this link, the literature has recognised the importance of considering these factors when implementing successful weight-loss programs for overweight cats.

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