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Obesity: why is it a welfare issue?

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ABSTRACT: Obesity in animals is an ever increasing problem we as veterinary professionals are seeing, but at what point does it become more than just a problem and become a welfare issue? This article will look into why obesity can be so detrimental to health and reasons why owners maybe do not see it in the same light we as veterinary professionals do. The media portrays extremely underweight animals as cruel, but overweight is seen as cute. This article aims to explain why clinically obese animals should be taken just as seriously if not more so as malnourished animals.

Keywords: Obesity; welfare; nutrition; body condition score; overweight

Introduction

Obesity is now the most common nutritional problem we see in cats and dogs (Sandoe et al., 2014). It is defined as an excess of body fat of 20% or more and is associated with many health issues. Despite this, obesity levels continue to rise due to lack of awareness in owners and humanising of their pet. Best practice is to perform a body condition score (BCS) to easily ascertain whether a patient is the correct weight or not every time the client visits the practice. This reinforces the importance of their pet being an ideal weight. Offering nutritional advice in the form of nursing clinics can also have massive benefits (Ackerman, 2012).

Health problems caused by obesity

There are many health issues that have been linked to obesity in both human and veterinary medicine. Some are reversible once a normal BCS is reached, others are not.

Heart and respiratory disease

In overweight animals fat gets deposited over the organs. This can cause difficulty breathing as well as putting excess pressure on the hearts ability to function causing tachycardia (Mullineaux & Jones, 2007). Weight loss can substantially improve quality of life, but often if an animal is overweight for a long period of time, the damage to the heart may be severe and irreversible.

Diabetes mellitus

Similar to people, excess weight is known to cause diabetes by contributing to insulin resistance. This in turn can then cause an

array of its own issues such as cataracts, urinary infections, seizures, enlarged liver, kidney failure and even ketoacidosis which in turn can lead to death (Mullineaux & Jones, 2007). In some cases this can be reversed once an ideal weight is achieved.

Hypertension

High blood pressure is a well-known side effect of obesity in human medicine and is often seen in animals too. This can be managed with medication and regular blood pressure checks and can return to normal parameters if weight is lost (Gajamayake et al., 2011).

Collapsing trachea

In some overweight animals the rings of the trachea can collapse inwards causing dyspnoea. This usually requires surgery to rectify, though weight loss would help (Mullineaux & Jones, 2007).

Hepatic lipidosis

Hepatic lipidosis in felines has no definitive cause, but obesity does seem to increase the risk. This is thought to be because in overweight cats, fat is deposited within the hepatocytes in the liver. It can be treated with medical intervention and the correct nutrition (Mullineaux & Jones, 2007).

Chronic kidney disease

Kidney disease can be caused by many factors, but one large contributing factor is pre-existing diabetes and/or hypertension. As already discussed obesity can cause both of these, so therefore can be linked to causing kidney disease too by proxy (Gajamayake et al., 2011). This unfortunately cannot be reversed by weight loss as the damage the

kidneys would already be done, it would however lessen other symptoms and so improve quality of life.

Joint disease

It is well documented how obesity can cause osteoarthritis and spinal disc problems. The excess weight puts pressure on joints, this coupled with muscle loss can cause irreversible damage. It also can lead to bulging discs and even cause them to herniate (Mullineaux & Jones, 2007).

Heat intolerance

Heat intolerance is more commonly seen in brachycephalic breeds, but other breeds can suffer too if overweight. This can be improved if not cured depending on breed, from weight loss (Mullineaux & Jones, 2007).

Ruptured ligaments

Excess weight can put pressure on joints which can lead to cruciate tears. Some cases can be resolved by rest and weight loss, others require surgical intervention followed by months of physiotherapy (Mullineaux & Jones, 2007).

Pancreatitis

High fat diets and obesity have been linked to causing pancreatitis in dogs. This can often be controlled with diet but often despite weight loss, the problem still exists to a degree (Gajamayake et al., 2011).

Cancer

In cats and dogs there has been links made with obesity and certain types of cancer such as mammary and urinary. Although there are limited studies on this, a link however small should be mentioned (Mullineaux & Jones, 2007). Obviously in this case weight loss would make no difference to the diagnosis.

Higher risk anaesthetic candidates

Although not a disease caused by obesity, it is important to mention that animals that are severely overweight are much more at risk when undergoing a general anaesthetic (Mullineaux & Jones, 2007). This is to do with many of the conditions mentioned above such as heart and lung issues, hypertension and tracheal issues; but it is also more difficult to achieve a stable anaesthetic as their weight is not an accurate representation of the amount of drugs needed (Gajamayake et al., 2011).

Welfare implications

According to the Animal Welfare Act 2006, animals should have the following provided to them:

- Health – ensuring the animal is free from pain, injury suffering and disease.
- Behaviour – ability to behave naturally for their species.
- Companionship – to be housed appropriately for their species; so either with or without a companion.
- Diet – to be provided with the correct diet **to prevent obesity or malnourishment.**
- Environment – ensuring a suitable environment is provided by ensuring the animal gets somewhere to both rest and exercise.

Looking at the above it is clear that by an owner having an obese pet they are in breach of the Animal Welfare Act in multiple ways. As most of the time obese animals are a result of incorrect feeding, the owner is not providing the correct diet (Mullineaux & Jones, 2007). But looking further they are also causing the animal to suffer ill health directly related to this, thus causing pain, injury, disease and/or suffering. Severely obese animals are often unable to display normal behaviour, for example running for dogs or climbing with cats. If the animal is then too large to exercise it can affect it having a suitable environment too, as well as this, obesity has been linked to impaired sleep (Sandoe et al., 2014). So by having an obese animal, an owner is actually in breach of four of the five freedoms listed in the Animal Welfare Act 2006. In malnourished animals where breach of the act is the case, animals can be seized from their owners. Yet this is not the case for obese animals, even though many of the conditions listed above are irreversible despite if an owner then manages to achieve successful weight reduction. Whereas on the contrary, many of those conditions associated with being severely underweight are often reversible once normal bodyweight is achieved (Gajamayake et al., 2011).

Discussion

This article has described what obesity is, the issues associated with it and why it should be considered a welfare issue. But why don't owners see it this way? And how can we as veterinary professionals help the situation?

Advertisements in the media and even animals in films are often overweight, some even obese, think of the likes of "Garfield" (Sandoe et al., 2014). Although innocent in intention, this normalises obesity. This leads to even more overweight animals which then again normalises and perpetuates the issue. As a Labrador cross owner myself, I am often

told my dog is too thin when I take him out for a walk. He is a BCS of 4.5. People are so used to seeing overweight animals, that when they see an ideal weight one, this appears underweight to them and they are horrified. This again supports the theory that owners believe underweight is bad but overweight is acceptable as they feel a need to vocalise it.

A BCS chart can be a useful way to help owners comprehend (Figure 1).

A BCS of 5/9 is considered ideal, with a 6 being considered 10% overweight. 7 and above is classed as obese and each ascending number equates to another 10% overweight. These charts can be a good visual aid to show owners and help them understand (Yam et al., 2016). As prevention is better than cure, getting owners to see that their dog is overweight earlier may prevent it becoming obese. It is also interesting to show people that if an animal was 30% underweight, i.e a BCS of 2 they would be shocked, yet why is an animal 30% overweight (BCS of 8) seen as acceptable in today's society? Education is key in helping get this obesity crisis under control, talking about it at primary vaccination appointments early in life can help prevent the problem before it starts (Yam et al., 2016). Also regularly weighing and performing BCS on patients every time they visit the practice can help stress the importance of it to owners. Many practices also offer free nutritional clinics to their clients to try and encourage them to bring their pet in for regular check-ups and to formulate a diet and exercise regime with the veterinary nurse. Other practices share helpful advice on social media pages or provide leaflets and posters in the waiting room (Ackerman, 2012). To ensure the message gets across, multimodal is best.

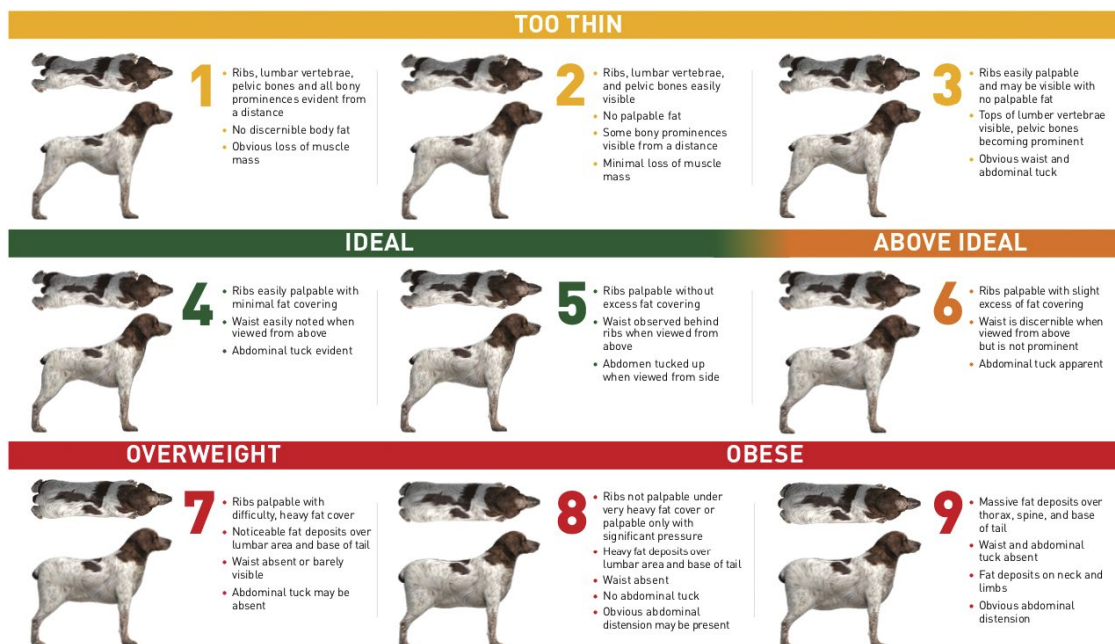
It is important to mention though that not all obesity cases are caused by an incorrect diet; it can also be the result of genetic predisposition, hormone imbalances or reduced metabolism caused by neutering (Sandoe et al., 2014). Nonetheless the latter can still be rectified by feeding the correct nutrition, so as always the importance of diet and exercise should be stressed to clients as many do not realise the catastrophic effects obesity can have on their animals health.

Conclusion

It is clear that obesity can cause a range of health issues, varying in severity. We can also see that in comparison to those



BODY CONDITION SCORE MEDIUM DOG



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Figure 1. BCS chart. Available at: <https://veterinary-practice.com/article/tis-the-season-to-be-eating>.

conditions caused by being underweight; the ones affecting overweight animals seem to be more chronic (Yam et al., 2016). As in the eyes of the law obesity is not seen as a welfare issue, we as veterinary professionals should be advocating that it should be. We must be encouraging owners to get their animals to an ideal bodyweight, by supporting them through the use of weight clinics and education. Our intervention can make a significant difference to the health and welfare of our patients (Yam et al., 2016).

Disclosure statement

No potential conflict of interest was reported by the author.

References

Ackerman, N. (2012). *The consulting veterinary nurse*. Wiley-Blackwell.

Animal Welfare Act 2006. Retrieved May 22, 2020, from <http://www.legislation.gov.uk/ukpga/2006/45/section/9>

Gajamayake, I., Lumbi, R., Greet, G., & Girling, S. (2011). Nutrition and feeding. In B. Cooper, E. Mullineaux, & L. Turner

(Eds.), *BSAVA textbook of veterinary nursing* (5th ed., pp. 337–338). British Small Animal Veterinary Association.

Mullineaux, E., & Jones, M. (2007). *BSAVA manual of practical veterinary nursing. Formerly BSAVA manual of veterinary nursing*. British Small Animal Veterinary Association.

Sandoe, P., Palmer, C., Corr, S., Astrup, A., & Bjornvad, R. (2014). Canine and feline obesity: A one health perspective. *The Veterinary Record*, 175(24), 610–616. <https://doi.org/10.1136/vr.g7521>

Yam, P. S., Butowski, C. F., Chitty, J. L., Naughton, G., Wiseman-Orr, M. L., Parkin, T., & Reid, J. (2016). Impact of canine overweight and obesity on health-related quality of life. *Preventive Veterinary Medicine*, 127, 64–69. <https://doi.org/10.1016/j.prevetmed.2016.03.013>