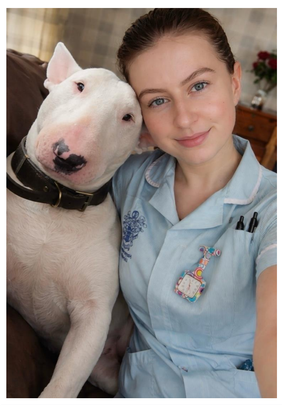
An Observational Study on the Provision of Nutritional Advice and Obesity Prevention During Discharge Procedures Following Canine Neutering.



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BVNA British Veterinary Nursing Association

Introduction

Canine obesity is a prevalent yet preventable disease in the United Kingdom, affecting 46% of dogs (PDSA, 2023). Neutering is associated with weight gain (WG) due to increased appetite and reduced metabolic rate (Bastan, 2025), yet guidance on post-neutering nutritional management remains inconsistent.

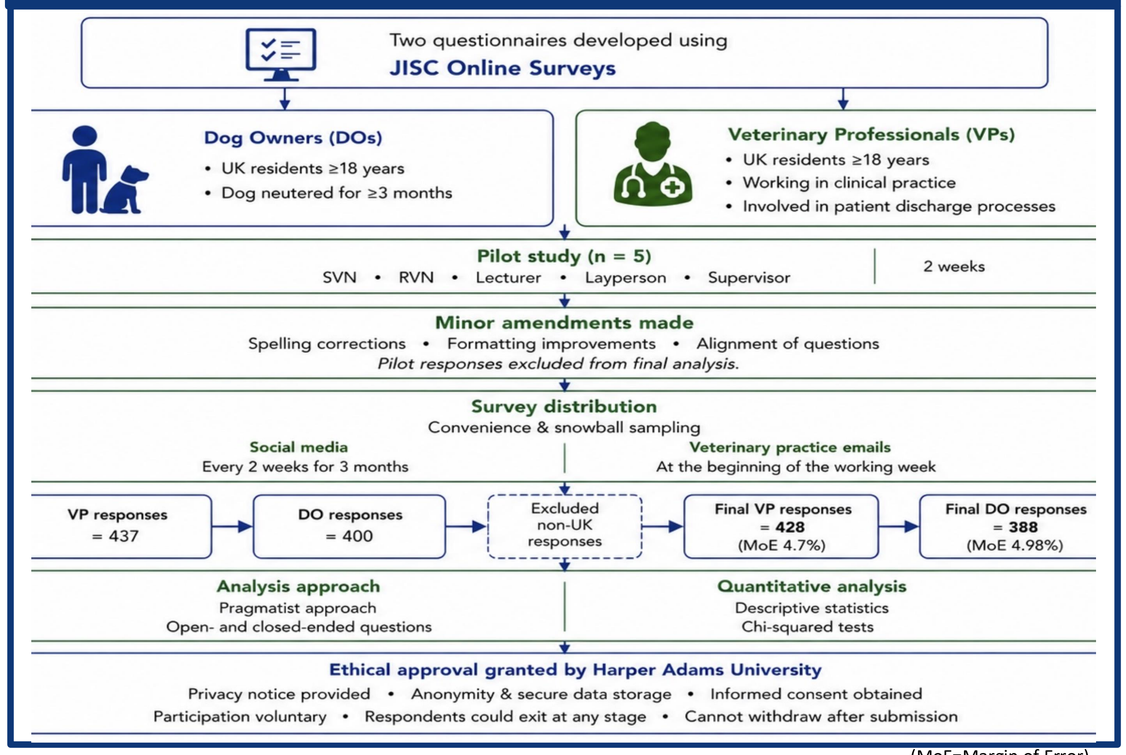
Owner awareness and compliance vary, with limited research on immediate preventative strategies. Obesity is multifactorial, with genetic susceptibility, reproductive factors, and owner management practices, such as exercise and diet, being significant contributors (Vendrami *et al.*, 2020).

Therefore, this study investigated nutritional guidance and obesity prevention following neutering from the perspectives of dog owners and veterinary professionals. Specifically, it examined the extent to which nutritional advice was provided at discharge and assessed any association between veterinary discharge guidance and post-operative weight gain in dogs. By exploring this, the study aimed to identify potential gaps in current practice and inform improvements in post-operative care and owner education.

Research Aims and Objectives

1. To evaluate discharge advice and post-operative care guidance, provided by veterinary professionals, relating to nutrition and exercise, following neutering procedures.
2. To assess owner understanding of their pet's body condition score and compliance with post-operative feeding and exercise recommendations.
3. To assess if there is an association between veterinary discharge advice and post-operative weight gain in canines.
4. To assess the provision of discharge advice relating to nutrition and exercise.

Methods



(MoE=Margin of Error)

Results

VPs were significantly more likely to report providing immediate ($\chi^2 = 248.41$, $p < 0.001$) and longer-term nutritional advice ($\chi^2 = 113.25$, $p < 0.001$) than dog owners (DOs) were to report receiving it. Post-neutering weight management was absent from 57% (n= 243) of practice protocols, and where guidance was provided, it varied considerably and was primarily delivered verbally (98%, n=421). Neutering was significantly associated with higher body condition scores (BCS), with BCS 6–9 increasing from 3.4% (n= 13) pre-neutering to 18.0% (n=70) post-neutering ($\chi^2 = 19.68$, d.f. = 1, $p < 0.001$). A significant association was also found between VP discharge advice and post-operative weight gain ($\chi^2 = 219.02$, d.f. = 1, $p < 0.01$).

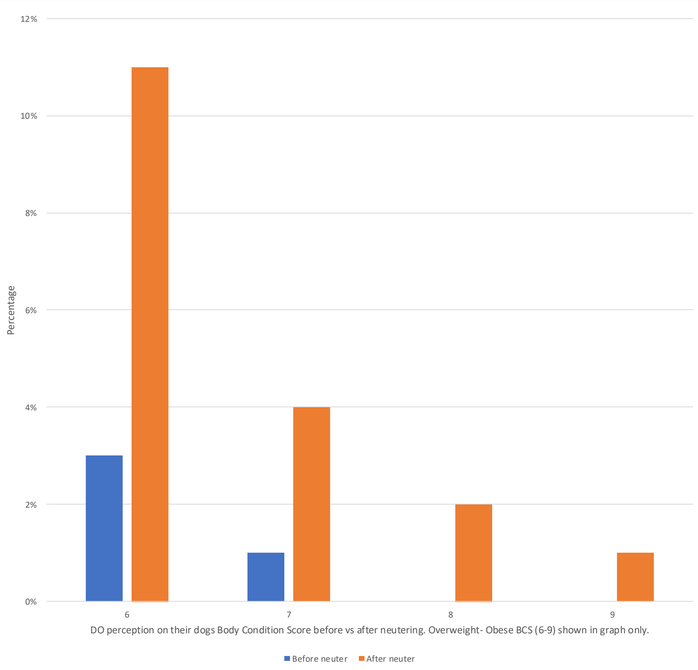


Figure 1: Graph to show owner perception on their dogs BCS before and after neutering

Owner awareness of post-neutering complications was limited, and nutritional discussions were influenced by owner engagement, current BCS, time constraints, and VP confidence. Although owners reported confidence in using BCS, they expressed a need for greater post-operative support regarding food requirements, diet selection, and weight management, with 93% (n=164) indicating they would attend a six month post-neutering weight check if offered. These findings suggest that inconsistent or absent nutritional discharge advice may reduce owner understanding and adherence, while structured nutritional guidance could help prevent post-operative weight gain.

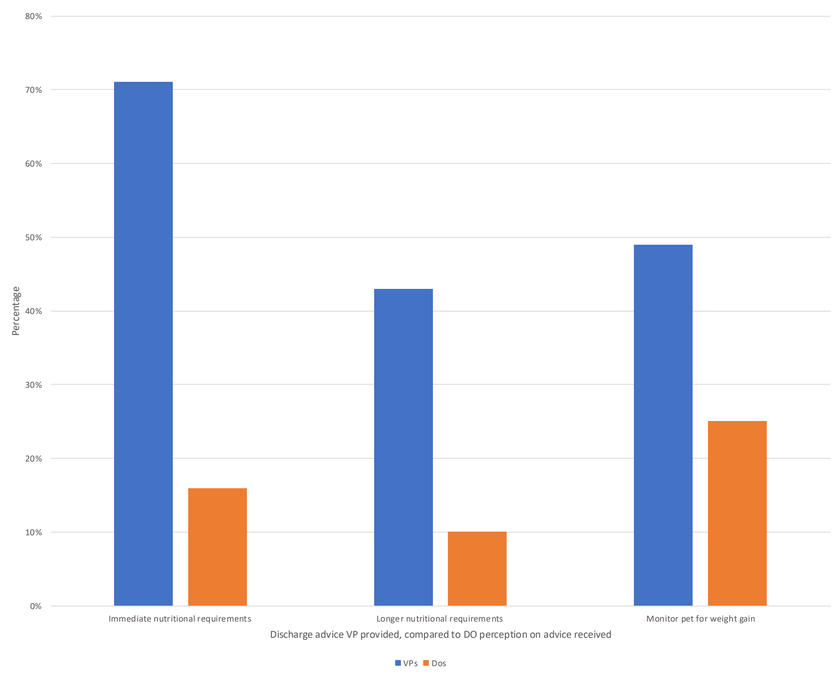


Figure 2: Graph to show discharge advice given vs received post neutering

Discussion/Conclusion

Summary of the Research Project

This study highlighted a lack of standardised nutritional guidance following canine neutering, resulting in inconsistent post-operative support for dog owners. Increasing the provision of nutritional information before and after the procedure may help reduce the number of owners receiving insufficient guidance. However, verbal advice alone may not ensure understanding or information retention, emphasising the need for supplementary resources such as written materials, emails, apps, and information packs.

Veterinary nurses are well placed to deliver this support through discharge consultations and nurse-led clinics, providing tailored advice, monitoring progress, and reinforcing recommendations. Follow-up appointments should be scheduled before clients leave the practice and supported by reminder systems, as 93% (n=164) of owners reported they would attend a six-month post-neutering weight check.

Providing evidence-based resources through veterinary practices may improve owner confidence, support body condition score monitoring, diet selection, portion control, exercise management, and weight-management goal setting. Furthermore, supporting veterinary professionals through regular training, evidence-based resources, and the integration of nutritional assessments into routine consultations may improve confidence, enhance client communication, and promote more consistent nutritional counselling. Overall, standardised discharge advice and ongoing follow-up may improve owner engagement and contribute to reducing post-neutering canine obesity.

Addressing the Research Objectives

1. This study identified a gap in the clarity or effectiveness of discharge communication, indicating a need for follow-up appointments.
2. DOs were confident using BCS but wanted more post-operative guidance to prevent post-neutering weight gain.
3. An association was found between VP discharge advice and post-operative weight gain in canines, particularly when nutritional advice was not provided.
4. Findings showed that nutritional advice and obesity prevention are often absent from practice protocols and, where present, lack standardisation, leading to inconsistent information that may contradict online sources.

Recommendation to Practitioners

Recommendations include implementing weight checks six months after neutering, with the use of body condition scoring. This provides an opportunity to monitor weight changes and offer guidance through standardised protocols. Follow-up calls should also be used to assess progress and address post-neutering concerns.

Recommendations for Future Research

Future research could repeat this study using matched data from owners and their corresponding VPs, allowing direct comparison.

It could also assess the extent to which dogs become overweight after neutering once a structured practice protocol is implemented, using a double-blind trial. With one group receiving verbal advice and the other information packs. The study could compare information retention and post-operative weight gain between groups, incorporating weight management guidance, BCS templates, and nutritional advice. A control group receiving no post-operative nutritional advice could also be considered; however, this may raise ethical concerns given the health risks associated with obesity.

Acknowledgements

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