### **POSTER PRESENTATION**



**Open Access** 

# Effect of physical activity on body condition in Swedish companion dogs

Sara Ringmark<sup>\*</sup>, Emma Björk, Anna Jansson

*From* Animal Obesity - causes, consequences and comparative aspects Uppsala, Sweden. 14-16 June 2015

#### Introduction

Obesity is believed to be an increasing health and welfare problem among companion dogs. In general, obesity is the result of imbalanced energy intake and utilisation, i.e. too much feed in relation to level of physical activity.

#### Objectives

The aim of this study was to assess body condition among Swedish companion dogs and to study if it could be associated with type and amount of exercise performed.

#### **Material and methods**

Body condition score (BCS, scale 1-9) was assessed in 102 companion dogs (inclusion criteria 1-10 years, max 120 min/week of activities in addition to walks) and owners were interviewed about daily time of walks, activity level of the dog during walks (Low: mostly walk, Medium: trot and some running, High: running) and of additional activities (yes/no). Statistical analysis were performed using a mixed model including age ( $\leq$ 5 years/ >5 years) activity level and additional activity as fixed effects and minutes of walk/day as a continuous variable. Effects were considered significant at p<0.05 and values are presented as Ismeans  $\pm$  SE.

#### Results

Thirty dogs (29%) had a BCS  $\geq 6$  and accordingly described as fat or obese. The BCS decreased as the level of activity during daily walks increased (Low 5.7 ± 0.3, Medium 4.7 ± 0.2, High 3.3 ± 0.3, p<0.0001) and BCS was also lower in dogs performing additional activities (3.9 ± 0.3 vs. 5.2 ± 0.2). Minutes of walks/day did not affect BCS.

\* Correspondence: sara.ringmark@slu.se

Department of Animal Nutrition and Management, Swedish University of Agricultural Science, Uppsala, Sweden

#### Conclusion

The study indicates that activity level during walks and additional activities may have a greater impact on BCS than duration of walks.

Published: 25 September 2015

doi:10.1186/1751-0147-57-S1-P10 Cite this article as: Ringmark *et al.*: Effect of physical activity on body condition in Swedish companion dogs. *Acta Veterinaria Scandinavica* 2015 57(Suppl 1):P10.

## Submit your next manuscript to BioMed Central and take full advantage of:

- Convenient online submission
- Thorough peer review
- No space constraints or color figure charges
- Immediate publication on acceptance
- Inclusion in PubMed, CAS, Scopus and Google Scholar
- Research which is freely available for redistribution

**BioMed** Central

Submit your manuscript at www.biomedcentral.com/submit



© 2015 Ringmark et al. This is an Open Access article distributed under the terms of the Creative Commons Attribution License (http:// creativecommons.org/licenses/by/4.0), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited. The Creative Commons Public Domain Dedication waiver (http://creativecommons.org/publicdomain/ zero/1.0/) applies to the data made available in this article, unless otherwise stated.