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**Factors predisposing to excess weight gain in dogs: management, attitudes  
and behavior of dog owners in Switzerland**

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## Factors predisposing to excess weight gain in dogs: management, attitudes and behavior of dog owners in Switzerland

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**Introduction.** Different factors predispose to canine overweight and (or) obesity [1] and are often influenced by the attitudes and the behavior of dog owners (DOs) [2] Hypothesis: there is often a superficial knowledge among the DOs about the susceptibility of dogs to the excess weight gain (EWG) and the correct management in terms of estimation of the ideal body weight, feeding control, frequency of physical activity and energy content of the diet.

**Animals, material and methods.** 126 visitors of a dog exhibition in Switzerland filled in a questionnaire including 16 questions: 6 open-ended and 10 multiple choice questions. General information of the participants: 114 (90%) currently owned a dog, 11 (9%) did not own a dog, 1 (1%) never had a dog. Professional involvement with animals (e.g. dog trainer, dog sitter, breeder, veterinarian) was stated by 29 (23%), no professional involvement by 83 (66%), 14 (11%) participants gave no answer (NA). 31 (25%) never visited the dog exhibition before. 107 (85%) owned adult dogs, average age was  $7.5 \pm 4.4$  years (average  $\pm$  standard deviation). 5 (4%) dogs were <12 months of age ( $7.3 \pm 3.5$  months), 14 (11%) NA. 80 (73%) of the dogs were purebred. Border Collie (12.5%) and Labrador Retriever (7.5%) were the 2 most represented breeds.

**Results and discussion.** 104 (82%) of the owners knew the current weight of their dog, 10 (8%) did not, 12 (9%) NA. Most of the owners 56 (44%) stated to estimate the ideal weight by regularly weighing their dogs while 50 (39%) relied on the Body Condition Score (BCS) [3]. Almost all owners 122 (99%) have referred to the individual growth curve to estimate the ideal weight of puppies. Commercial foods were used by 85 (67%) of DOs. 90 (71%) dosed the daily ration accurately by using a measuring cup or a scale. 29 (23%) prepared the ration estimating the weight of the food and only 3 (2%) provided the food ad libitum, 4 (3%) NA. 76 owners (60%) did sporting activities with their dog, of which only 4 (5%) regularly for more than 10 hours per week. Agility dog (38%) and mantrailing (33%) were the most popular activities. DOs were asked which nutrient influence the energy content of the diet. 38 (30%) answered correctly carbohydrates, proteins and fats. 83 (66%) did not answer the question correctly, without indicating all three of the nutrients listed or including vitamins and minerals, 5 (4%) NA.

**Conclusion.** This study showed that most of DOs in Switzerland pay attention to the factors predisposing to EWG in dogs. As has been shown in 2017 DOs visiting the same event tend to underestimate the body condition of their dogs [4]. Based on the new results collected, the frequency of physical activity and the knowledge of the energy value of nutrients among DOs are aspects that should be improved as part of the prevention of EWG in dogs.

**References:** [1] Gossellin et al. (2007) J. Vet. Pharmacol. Ther. 30:1-10; [2] Bland et al. (2009) Prev. Vet. Med. 92:333-340; [3] German et al. (2006) J. Nutr. 136: 2031-2033; [4] Gerstner, Liesegang (2017) J. Anim. Physiol. Anim. Nutr. 101:15-20.