REVIEW OF PET DOG FEEDING HABITS IN SPAIN

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Introduction

Few epidemiological data exist about dog feeding habits and management in Europe (Freeman *et al*, 2006; Lund, 1999; Patronek, 1997).
Moreover feeding patterns, as well as environment conditions and management of pets affect animal health, behavior and welfare (Fernstrom, 1994; Houpt, 2003).

Objective: A retrospective epidemiological study was carried out to analyze trends of the feeding habits of 1,000 pet dogs in Spain. The specific aim was to analyze the effect of environmental factors (such as type of house, urban or rural area, dog's activity level, number of daily walks) on the dog feeding habits as well as the relationship between the type of food, management and family composition (young or old family members, presence of children or other pets in the household). Furthermore, relationship between dog feeding habits and management and behavioral problems were observed (n=500).

Material & Methods

ANIMALS: 1,000 dogs (*Canis familiaris*) were observed for the purpose of behavioral and clinical evaluation at the Clinical Behavioral Service of the Veterinary Teaching Hospital of the Universitat Autònoma de Barcelona between 1995 and 2005.

PROCEDURE: The following information was recorded for each dog: age, breed, sex, environment in which the animal lived and type of family, daily activity as well as clinical, behavioral and dietary history, including current and previous type of food and feeding patterns.

DATA ANALISIS:

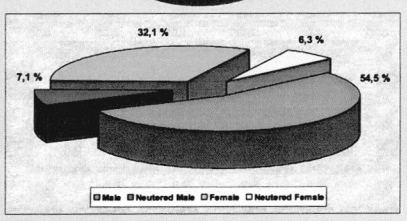
Descriptive study (n=1,000): Caractheristics of dog population (sex, age, breed), type of food (dry, wet, mixt), modality of administration (meal fed or free choice), family composition (family size, presence of children), envinronment (flat, house, presence of garden or terraces), exercice (walk frecuency, duration of the activity).

Effects on behavior (n= 500). Relationship between dog dietary habits and management and behavioral problems. Data were analyzed by means of chi-squared test using SPSS (12.0 Chicago, USA).

Descriptive Results

A. Dog characteristics

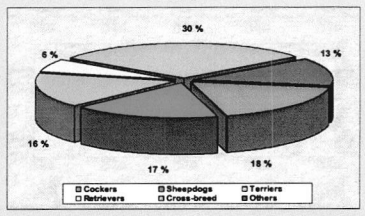
Gender



Age

Puppies (< 1 year)	12,3 %
Young adult (1 < 3 years)	24,7 %
Adult (3 < 7 years)	44,3 %
Senior (> 7)	18,7 %

Breed



Size

Small (< 10 Kg)	27,6 %
Medium (10 < 25 Kg)	28,1 %
Big (> 25 Kg)	44,3 %

B. Environment

FAMILY COMPOSITION

- Number of members:
  1 = 9,6 %
  2 = 48,8 %
  3 = 19,5 %
  ≥ 4 = 22,1 %
- Family with Children: 21,7 %

KIND OF HOUSE

- Flat with/without terrace: 93,4 %
  (Flat with other room: 50,3 %)
- House with garden: 3 %
- House without garden: 3,6 %

ACTIVITY

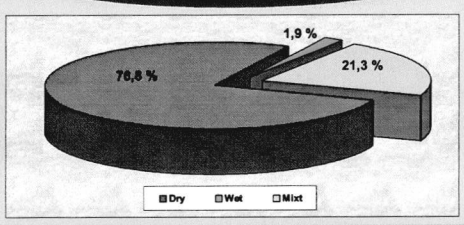
- Frecuency of walks:
  1/day = 9,8 %
  2/day = 49 %
  3 /day = 18,9 %
  ≥ 4/day = 22,3 %

WALKS

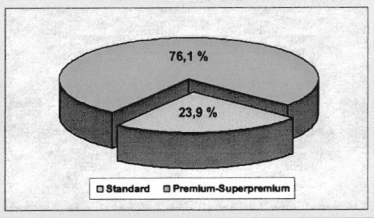
- Duration:
  < 30' = 21,2 %
  < 60' = 23,3 %
  < 120' = 26,2%
  >120' = 29,3%

C. Food and dietary management

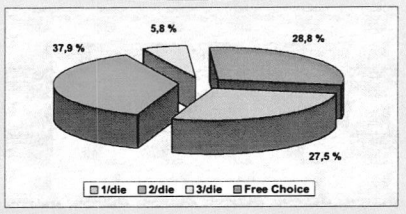
Type of food



Comercial segment



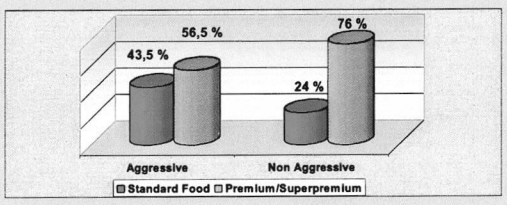
Feeding pattern

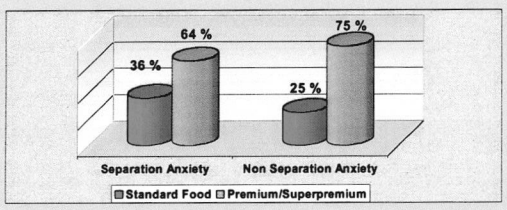


Effects on behavior

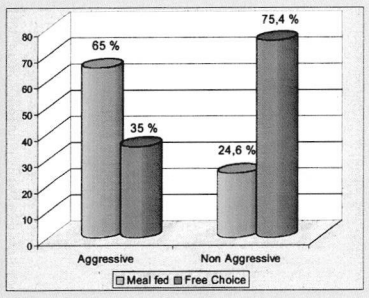
Some management and dietary characteristics are related with dog behavior problems and welfare.

Relationship between segment of food (Standard *versus* Premium and Superpremium) and Aggressive Behavior towards Family Members (p= 0,019) and Separation Anxiety (p<0,05)

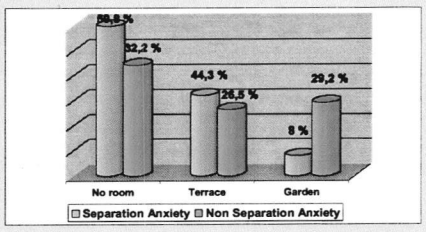




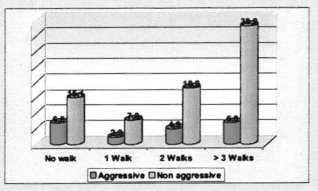
Relationship between feeding management (meal fed *versus* free choice) and Owner-Directed Aggressive Behavior (*food defense)* (p=0,005)



Relationship between dog environment and Separation Anxiety (p=0,001)



Relationship between dog management (frecuency and duration of walks) and Aggressive Behavior towards Family Members (p<0,05)



Conclusions

The epidemiological study about feeding habits in dogs verify that the most common type of food consumed is high-medium quality dry food in twice-daily feeding. The average owner is a couple withouth children living in a flat. This study suggests that diet, feeding pattern and management may play a role in the pathophysiology of behavior problem in dogs.
Results can be used by veterinary practitioners to better understand and anticipate problems caused by dietary habits. In addition, they can help inform pet owners about the risks related to the animal's life style and about feeding habits.

References

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