Highly palatable, calorically dense, complete and balanced food supports nutritional status of dogs living with cancer[1]

Introduction:

Dogs with cancer often lose their appetite, which leads to weight loss and contributes to cachexia. This study investigated the effectiveness of a new highly palatable, complete and balanced, energy-dense clinical food in dogs with cancer.

Study design:

Study days	0	1	2	3	4	5	6	7	8	9	10	14	21	28
Transition to study food														
Pet parent assessment														
Eating enthusiasm														
Food intake														
Quality of life														
Stool quality														
Veterinarian assessment														
Body weight														
Laboratory tests														

The dogs were fed DER based on the body weight at enrollment.

Pet eating enthusiasm scale

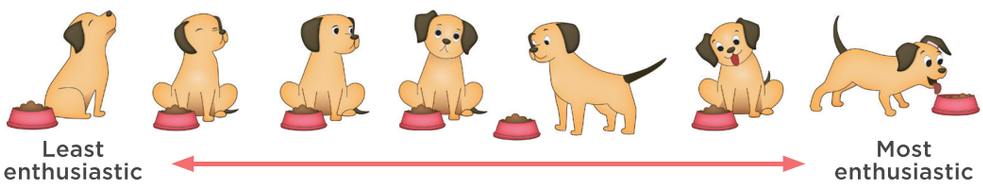

Figure 1. A scientifically validated emoji scale was used by pet parents to assess eating enthusiasm.[2]

Results:

Patients: 65 dogs were enrolled in the study (25 with benign tumours, 40 with malignant tumours). Mean age was 9.3 ± 2.6 years, mean body weight 28.0 ± 10.6kg, 52% were female and 40% were purebred dogs.

Eating enthusiasm: Of dogs enrolled, 97% successfully transitioned over 7 days to eating the study food. Mean eating enthusiasm score on emoji scale (1 = the least enthusiasm to eat; 7 = the most enthusiasm to eat) for all dogs at time of enrollment was high at 6.1 and continued to stay high during the study. Dogs with malignant tumours showed a significant improvement in eating enthusiasm by day 3 (P = 0.0002) compared with baseline.

Quality of life: Dogs in the malignant tumours group experienced significant improvements in 'acting like normal today' (P = 0.0293) and 'dog is joyful today' (P = 0.0436) when compared with baseline.

The study

13
general or oncology speciality practices in the USA

65
adult dogs with malignant or benign tumors

28
days of feeding Prescription Diet ON-Care dry (study food)

Eligibility

Cancer confirmed by histopathology

Dogs treated or not treated with anti-cancer therapy

Dogs stabilised on non-steroidal anti-inflammatory drugs or prednisone

Maximum 10% calories from treats

Exclusions

Appetite stimulants

No food intake of multiple days duration

Other major medical conditions

Faecal score: Faecal scores (1 – liquid diarrhoea, 5 – firm feces) did not change over time and consistently remained above 4 for all dogs during the study.

Caloric intake: Intake (kcal / day / metabolic body weight) gradually increased for all dogs and plateaued at day 14 (Figure 2).

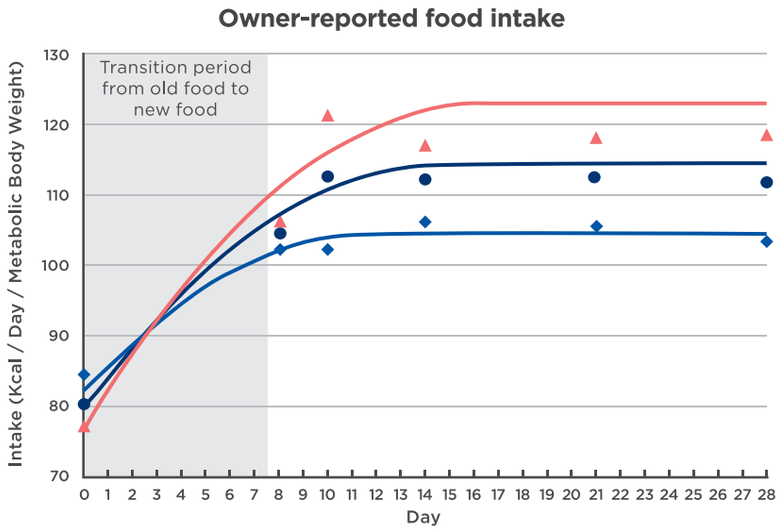

Figure 2. ● All tumours: Plateau = 114Kcal at Day 14
◆ Benign tumours: Plateau = 104Kcal at Day 11
▲ Malignant tumours: Plateau = 123Kcal at Day 16

Body weight: Body weight increased significantly at day 28 in both groups when compared with baseline (Figure 3).

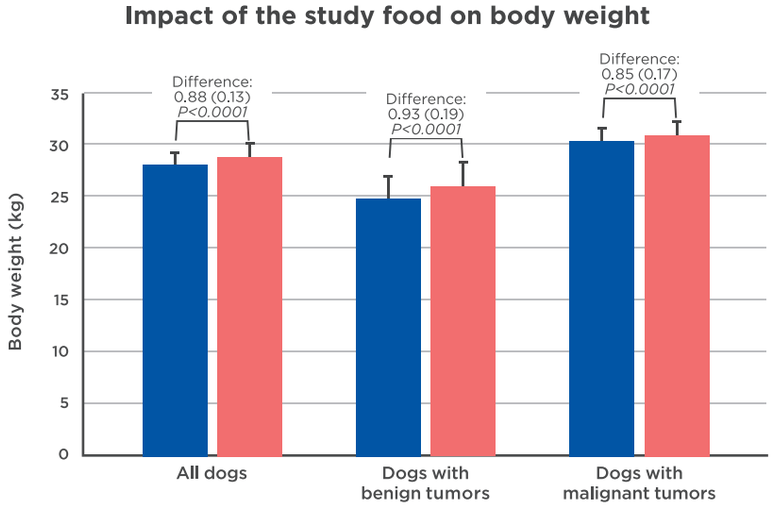

Figure 3. Data are represented as means and standard errors. ■ Enrollment ■ Day 28

Key conclusions

The study demonstrated high acceptance and continued eating enthusiasm of a new clinical food in dogs with cancer. There was a significant increase in the amount of food consumed and caloric intake, which was associated with positive effects on body weight, stool consistency and quality of life. This study supports the use of the new clinical nutrition to maintain and improve nutritional status of dogs living with cancer.

References:
[1]Anthony RM, Amundson MD, Brejda J, Becvarova I. Acceptance of a novel, highly palatable, calorically dense, and nutritionally complete diet in dogs with benign and malignant tumors. *Vet Sci* 2023;10(2):148 (https://doi.org/10.3390/vetsci10020148).
[2]Vanchina MA, Vondran JC, Swaney-Stueve M. Development and validation of an emoji-based pet eating enthusiasm scale, 2022 (Hill's data on file).

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