

Conflicts between Cats

Kittens live in groups with very few conflicts and competition, whereas adult cats living together in close quarters can experience conflicts. Cats are also believed to lack well developed post-conflict reconciliation capabilities for repairing the bond that can be damaged during confrontation, leading to social conflicts that can potentially last for months or years. This can be a serious life-long issue for multiple cat owners (30-56% of households in Europe and the US¹), and 20-30% of these households report overt conflict or tension between their cats. This also often leads to house-soiling, which can then ultimately lead to relinquishment.

Conflict between cats within a multiple cat home occurs within the first 1-2 weeks of cat introduction in half of the cases reporting this problem². Fighting may be associated with scratching or biting at initial meeting. In other cases, conflict can suddenly arise following an abrupt event (e.g. sexual maturity of one cat, return from a vet hospitalisation, moving home, etc) with the household never returning to previous harmony.

The conventional treatments for inter-cat conflict typically incorporate environmental and behavioural modifications: physical separation, positive reinforcement for reintroduction, restraint of one or both cats in separate cages/carriers, odor exchange, attaching a bell to the collar of the aggressor cat to warn the victim cat, etc. Veterinarians also prescribe pharmacological medications in some cases, although no treatment or combination between all the above options has been proven to increase the likelihood of cure².



1 Market survey, GfK, 2014.

2 Fevine et al (2005). Intercat aggression in households following the introduction of a new cat. Applied Animal Behaviour Science.

FELIWAY® FRIENDS Diffuser (cat appeasing pheromone analogue) now provides an answer for restoring and promoting harmony in these households.

FELIWAY® FRIENDS is the first and only product clinically proven to reduce tension and conflict between housemate cats.

- A visible reduction in conflict behaviours was seen in the first week
- After 1 month, 84% of cat owners using **FELIWAY® FRIENDS** reported significant improvement in cats getting along
- After the study, participants in the placebo group experienced a relapse in conflict behaviours, whereas interactions in the **FELIWAY® FRIENDS** group had stabilised.

FELIWAY® FRIENDS, initially available under the **FELIWAY® MultiCat** brand name in the US.

Evaluation of the efficacy of a new pheromone product versus placebo in the management of feline aggression in multi-cat households.

DePorter T.L., Lopez A., Ollivier E.

Proceedings of the ACVB/AVSAB Veterinary Behavior Symposium, Denver, 2014, pp 17-18

Aggression and social tension amongst housemate cats is common and puts cats at risk for injury or relinquishment. This pilot study evaluated cat appeasing pheromone product **FELIWAY® FRIENDS** for its efficacy to reduce aggression between housemate cats.

A randomised, double-blind, placebo-controlled trial included 45 multi-cat households [**FELIWAY® FRIENDS** group (n=20), placebo group (n=25)] that reported aggression for at least 2 weeks (range 17-3,931 days, average=822 days). Cases with history of extreme behaviour that puts humans or cats at risk for serious injury were excluded.

Each household included 2-5 cats (most often 2 or 3 cats), over 6 months of age and spending at least 2/3 of their time indoors. Volunteers attended a group meeting 7 days prior (D-7) and the veterinary behaviourist described behaviours to be monitored for 7 weeks using the Oakland Feline Social Interaction Scale (OFSIS) which assessed the frequency and intensity of 12 aggressive interactions (e.g. bite, swat, stare, block, hiss or scream) typically displayed in inter-cat conflicts.

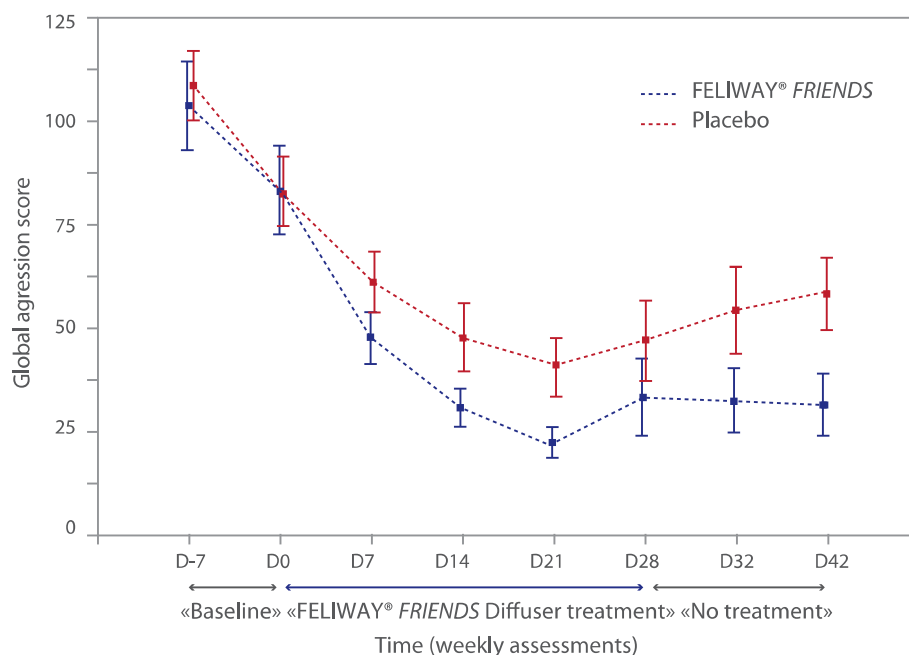
Participants were provided directions for safely handling aggressive events. Punishment techniques were discouraged.

Two similar diffusers per home were plugged-in for 28 days, in two different rooms, either **FELIWAY® FRIENDS** or placebo. Participants completed daily diary of aggressive events and weekly OFSIS during 7 weeks: 1 week baseline (D-7 to D0); 4 weeks **FELIWAY® FRIENDS** Diffuser (D0 to D28); 2 weeks relapse period without **FELIWAY® FRIENDS** (D28 to D42).

Results

Weekly OFSIS scores were calculated from owner reported observations. The OFSIS scores (possible 0 to 360) were similar at baseline (mean±SE **FELIWAY® FRIENDS**, 105.1±11.1 vs placebo, 109.6±8.5 at D-7 and 83.4±10.4 vs 83.5±8.3 at D0).

FELIWAY® FRIENDS group showed a lower mean OFSIS score than placebo at D7 (47.8±6.3 vs 61.8±7.7), D14 (30.8±4.9 vs 48.0±8.3), D21 (21.8±3.9 vs 40.7±7.4), D28 (33.2±9.7 vs 47.0±9.7) which continued after **FELIWAY® FRIENDS** use D35 (32.5±8.0 vs 55.0±10.5) and D42 (31.2±8.1 vs 59.0±9.0). [Repeated measures ANOVA $F(1, 43) = 4.34, p=0.0431$].



Evolution of OFSIS conflict score in the full analysed population (N= 45 multicat households)

Before the diffusers were even plugged in (D-7 to D0), the OFSIS score decreased similarly in both groups between D-7 and D0 which may be explained by improved owner understanding about feline aggression and the importance of not punishing. During the period **FELIWAY® FRIENDS** was used (D0 to D28), the aggression score continued to decrease in both groups, with a greater decrease in the **FELIWAY® FRIENDS** group than in the placebo group, as early as D7. The greatest difference was observed on D21. There was a statistically significant difference between the two groups on D14 ($p=0.0833$) and D21 ($p=0.0308$). After unplugging the diffusers (D28 to D42), the OFSIS score remained stable in the **FELIWAY® FRIENDS** group versus increasing again in the placebo group, with a statistically significant difference on D42 ($p=0.0357$). Over the full trial period (D0 to D42) the difference between the two groups was also significant ($p=0.0433$).

Conclusion

This study suggests that **FELIWAY® FRIENDS** can help the management of aggression between housemate cats which may restore harmony and balance in the multi-cat home.

Recommendations for Use:

Reduce or manage conflict between cats

- Resources are important in all feline households, but they are the key to harmony and improved pet welfare in the multiple cat home:
 - Resources (cat food & water bowls, litter box...) should be spread throughout the home to ensure each cat can access their own resources without sharing.
 - Ideally one bowl, litterbox and separate sleeping area per cat + 1 for all resources.
- A **FELIWAY® FRIENDS** Diffuser should be plugged in the room where cats spend most of their time resting or lounging, and not in the room where fights occur.
- Several diffusers may be needed, especially if the conflicting cats mostly live in completely separate areas.
- Diffusers should not be plugged in under furniture, as circulation of **FELIWAY® FRIENDS** will be impaired and the efficacy of the product may be affected.
- The diffuser(s) should be switched on continuously for at least 4 weeks and the refill replaced as required.
- Cats might benefit from permanent use of **FELIWAY® FRIENDS**.
- Additionally, owners should be provided with simple advice to manage the conflict:
 - Never punish/startle/reprimand the cats after an aggressive encounter.
 - Minimum intervention, only if at risk for injury.
- In case of concomitant marking issues such as urine spraying and vertical scratching on household items (whether linked to the conflict or not), **FELIWAY® FRIENDS** Diffuser can be combined with **FELIWAY® CLASSIC** Diffuser:
 - Both can be plugged in the same room (preferably not using the same plug).
 - Target room is the one where cats spend most of their time, even if marking behaviours occur in a different room than cat's preferred resting room.

Prevent conflict, especially following a new cat or kitten introduction

- When introducing a new cat into a home with already at least one resident cat, **FELIWAY® CLASSIC** Diffuser is best indicated to help prevent behavioural problems linked to the environmental change. If conflict already exists within the home prior to the introduction of the new cat, **FELIWAY® FRIENDS** Diffuser should be in use prior to the introduction and should remain, along with **FELIWAY® CLASSIC** Diffuser when introducing the new cat, to minimize the chances of escalating conflict.
- **FELIWAY® CLASSIC** Diffuser is also advised to help adjust to moving home, or before bringing a cat back home from the vet practice following a surgery or even a short hospitalization (as the cat will come back with a different smell and a potential different behaviour). These situations are known to potentially elicit conflict between cats living together.
- In addition to pheromonotherapy, behavioural and environmental modifications are required, such as proper resources distribution (see above) and gradual introduction or temporary separation.