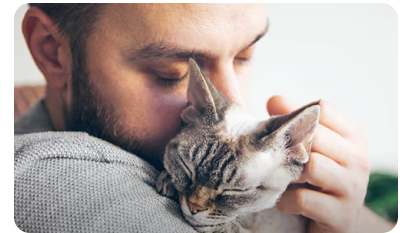


Cat Allergen Management

Managing Cat Allergens



Allergies to cats affect as many as 1 in 5 adults worldwide, and human allergists typically recommend avoiding cats to reduce allergen exposure.¹ However, most cat owners consider their pets as part of the family, and often resist removing the cat from the home. A novel nutritional approach can help neutralize the major cat allergen (Fel d 1) in cats' saliva, before Fel d 1 spreads to the environment. As part of a comprehensive cat allergen management program, this new approach provides an opportunity to reframe conversations with pet owners: it can help reduce exposure to the allergen – not to the cat.

Key Messages

- 95% of people who have sensitivities to cat allergens are responding to Fel d 1, the major cat allergen.²
 - Fel d 1 is produced primarily in the salivary and sebaceous glands, spread throughout the cat's hair during grooming, and then shed into the environment with hair and dander (dead skin cells).
- Cat allergens have consequences for both the allergen-sensitive owner and the cat.
 - Limiting interactions between owners and their cats in efforts to avoid or reduce allergen exposure can cause anxiety and stress for the cat.^{3,4}
 - Allergies are one of the top reasons for relinquishment of cats to shelters.⁵⁻⁸
- A nutritional approach can safely help reduce active Fel d 1 on the cat, *before* the allergen gets into the environment.⁹⁻¹¹
 - Published studies show that when cats eat kibble coated with an egg product containing antibodies to Fel d 1, this ingredient can bind to the allergen in the cat's saliva and neutralize the allergen. This neutralized Fel d 1 is distributed through grooming and shed into the environment, but is not recognized as an allergen by a sensitized individual's immune system.
 - 47% reduction, on average, of active Fel d 1 on cat's hair beginning with the third week of feeding the diet.
 - 97% of cats showed decreased levels of active Fel d 1 on the hair and dander.
 - This approach maintains normal allergen production by the cat, without affecting the cat's overall physiology.

References

1. Bousquet, P. J., Chinn, S., Janson, C., Kogevinas, M., Burney, P., & Jarvis, D. (2007). Geographical variation in the prevalence of positive skin tests to environmental aeroallergens in the European Community Respiratory Health Survey I. *Allergy*, 62, 301–309. doi: 10.1111/j.1398-9995.2006.01293.x
2. Bonnet, B., Messaoudi, K., Jacomet, F., Michaud, E., Fauquert, J. L., Caillaud, D., & Evrard, B. (2018). An update on molecular cat allergens: Fel d 1 and what else? Chapter 1: Fel d 1, the major cat allergen. *Allergy, Asthma and Clinical Immunology*, 14, 14. doi: 10.1186/s13223-018-0239-8
3. Adamelli, S., Marinelli, L., Normando, S., & Bono, G. (2005). Owner and cat features influence the quality of life of the cat. *Applied Animal Behaviour Science*, 94, 89–98. doi: 10.1016/j.applanim.2005.02.003
4. Mills, D., Karagiannis, C., & Zulch, H. (2014). Stress—its effects on health and behavior: A guide for practitioners. *The Veterinary Clinics of North America: Small Animal Practice*, 44(3), 525–541. doi: 10.1016/j.cvsm.2014.01.005
5. Coe, J. B., Young, I., Lambert, K., Dysart, L., Borden, L. N., & Rajic, A. (2014). A scoping review of published research on the relinquishment of companion animals. *Journal of Applied Animal Welfare Science*, 17, 253–273.
6. Cosme-Blanco, W., Arce-Ayala, Y., Malinow, I., & Nazario, S. (2018). Primary and secondary environmental control measures for allergic diseases. In M. Mahmoudi. (Ed.), *Allergy and asthma* (pp. 1–36). Switzerland: Springer Nature. doi: 10.1007/978-3-319-58726-4_36-1
7. Svanes, C., Zock, J.-P., Antó, J., Dharmage, S., Norbäck, D., Wjst, M., Heinrich, J., Jarvis, D., de Marco, R., Plana, E., Raheison, C., & Sunyer, J. (2006). The Early Life Working Group of the European Community Respiratory Health Survey. Do asthma and allergy influence subsequent pet keeping? An analysis of childhood and adulthood. *Journal of Allergy and Clinical Immunology*, 118(3), 691–698. doi: 10.1016/j.jaci.2006.06.017
8. Zito, S., Morton, J., Vankan, D., Paterson, M., Bennett, P. C., Rand, J., & Phillips, C. J. C. (2016). Reasons people surrender unowned and owned cats to Australian animal shelters and barriers to assuming ownership of unowned cats. *Journal of Applied Animal Welfare Science*, 19, 303–319. doi: 10.1080/10888705.2016.1141682
9. Matulka, R. A., Thompson, L., & Corley, D. (2020). Multi-level safety studies of anti Fel d 1 IgY ingredient in cat food. *Frontiers in Veterinary Science*, 6, 477. doi: 10.3389/fvets.2019.00477
10. Satyaraj, E., Li, Q., Sun, P., & Sherrill, S. (2019). Anti-Fel d 1 immunoglobulin Y antibody-containing egg ingredient lowers allergen levels in cat saliva. *Journal of Feline Medicine and Surgery*, 21(10), 875–881. doi: 10.1177/1098612X19861218
11. Satyaraj, E., Gardner, C., Filipi, I., Cramer, K., & Sherrill, S. (2019). Reduction of active Fel d 1 from cats using an anti Fel d 1 egg IgY antibody. *Immunity, Inflammation and Disease*, 7(2), 68–73. doi: 10.1002/iid3.244

The Purina Institute aims to help put nutrition at the forefront of pet health discussions by providing user-friendly, science-based information that helps pets live longer, healthier lives.

