



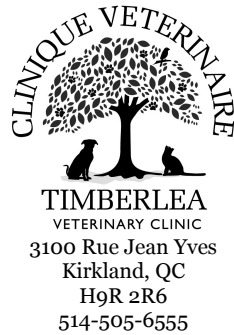
Controlling Exposure to Pollens

Pollen allergies are generally caused by pollens carried by outside air currents. Pollens dispersed by air may travel for great distances. For example, ragweed pollen has been collected as far as 400 miles out to sea and as high as two miles in the air. Plants can generate millions of pollen particles per day and most never reach their targets. Instead, they may be inhaled or absorbed into the skin of the pet causing a sensitized pet to have an allergic reaction.

Total avoidance of allergenic pollens is impractical. There are, however, several methods that can help decrease exposure to pollens (when used in conjunction with other treatments, such as immunotherapy).

The following are suggestions to aid in reducing exposure to pollen:

1. Keep lawn grass cut short to reduce seed and pollen production.
2. Keep pets off the lawn one to two hours after mowing or when the lawn is wet.
3. Avoid prolonged outdoor exposure during peak pollen counts, allergy seasons, when humidity is high and on windy days.
4. Avoid letting pet put head out of car windows when traveling.
5. Confine pets indoors during early morning and evening hours when pollen counts are usually highest.
6. With a damp cloth, wipe pet's feet, body and face after being outside to remove pollen from hair, coat and skin.
7. Close windows and use air conditioning when possible.
8. Use high-efficiency air conditioner and furnace filters.
9. Vacuum and dust frequently, keeping pet out of the room while doing so.
10. Dry pet's bedding in the dryer instead of outside.
11. Frequently bathe pets using hypoallergenic shampoos, leave-in conditioners and cool water rinses (once or twice a week)
12. Keep pets groomed and clipped to lessen collection of pollen on hair, coat and skin.
13. Put a t-shirt on your animal when you go for a walk (or if left outside for a while)



Allergies: Food elimination diet for dogs

Food allergies often manifest themselves with signs of skin disease. Allergies are most commonly a reaction to a protein source, and the goal of feeding a “hypoallergenic” diet is to decrease immune reactions to the offered protein source and, therefore, improve the skin disease. To diagnose a food allergy, one must feed a strict diet with one protein source that is either commercially prepared or home-cooked. The commercial diets discussed here consist of either one novel-protein source or a hydrolyzed protein diet. Some animals can have reactions to proteins associated with a carbohydrate source, so these diets are also prepared with one carbohydrate source.

So how do you choose a diet for your pet?

2 Types of food:

1. **Novel protein**: A novel protein diet consists of a protein source that your pet has likely not been previously exposed to and therefore cannot have developed an immune response to it. The novel protein diets have more options in terms of potential protein sources as well as canned varieties compared to the hydrolyzed diets. These diets are typically more calorie dense than the hydrolyzed diets so portion control must be followed closely to prevent weight gain. One thing to keep in mind when choosing a diet is that pets with beef allergy may react to venison and pets with chicken allergy may react to duck protein sources.
2. **Hydrolyzed protein**: A hydrolyzed protein diet consists of a single protein source that is specially processed to break the structure of the protein down into multiple, tiny particles that the immune system will not recognize as an allergen. This method has been used for several years in infant formula to decrease food hypersensitivity. Soy and chicken are common protein sources used in making these diets. Soy may be preferable since few dogs have been fed soy based diets previously so it is less likely that they have been sensitized to it. It has been found that hydrolyzed soy is extremely digestible and well absorbed from the gut. Clients occasionally report that their pets find these diets more palatable than the novel protein diets. Unfortunately, whole soy is not an option for home-cooked diets.

1. **Novel protein**

- a. Homemade diet
 - b. RCC Sensitivity RC (Catfish)
 - c. RCC Hypoallergenic (Duck & potato)
 - d. RCC Vegetarian (Oat groats, Rice, Potato protein)
 - e. Hills d/d (Potato & Venison)
 - f. Hills d/d (Potato & Salmon)
- Choosing ingredients the animal has never been exposed to
 - Works better if you've had the dog as a puppy (hard to know what the dog was exposed to before being adopted)
 - Ideally, choose a protein that is far from what the dog normally eats (i.e. use fish instead of duck when the dog normally eats chicken)
 - Avoid 'holistic' diets or the 'hypoallergenic' found in pet stores as they are not governed by any quality agencies and they are not subjected to clinical trials (risk of cross-contamination, protein lesser quality, non-balanced, etc.)

2. **Hydrolysed protein**

- a. RCC Hypoallergenic HP (≤ 10 Dalton)
 - b. RCC Hypoallergenic HP Small Breed (≤ 10 Dalton)
 - c. RCC Anallergenic (≤ 1 Dalton)
 - d. Hills z/d (not recommended since size of the proteins can't be divulged)
- Must be integrated slowly and gradually over a period of minimum 10-14 days (hydrolysed protein have more chance of giving diarrhea)
 - It is estimated that hydrolyzation of the protein may still trigger an allergic response in $\sim 10\%$ of animals allergic to the unhydrolyzed form
 - The RCC Anallergenic is the only diet that cannot trigger an allergic reaction since the size of the protein is so small it cannot be recognized by the cells

Reference

http://www.merckmanuals.com/vet/integumentary_system/food_allergy/overview_of_food_allergy.html
<http://www.2ndchance.info/homemadediets-novelproteinVsHydrozd.pdf>

So how do you proceed?

1. Everybody in the family has to be on the same page, even the visitors!
2. Choose the best elimination diet for your dog in collaboration with your veterinarian
3. Nothing but the new food and water can cross your dog's lips.
 - a. No treats, no cookies, no vegetable, no table food
 - b. No flavored toy, no chewing bones, no rawhide
 - c. No flavored medication (i.e. Heartworm meds), no toopaste
 - d. NOTHING!!!
4. Do not use the same measuring cup for the old food and the new one
5. Once the initial transition of food is finished,
 - a. disinfect the dog's dishes in the dishwasher
 - b. wash any toys (rope, stuffed toy) in hot water
 - c. wash the dog's bed and/or cushion
 - d. think of anything your dog could have put in his mouth or licked before and wash it in hot water
 - e. If it can't be washed, throw it out!
6. Look at it as a peanut allergy for a kid: avoid any cross-contamination
7. The new food has to be fed for a minimum of 3 months
8. If your dog accidentally eats another pet's food or table scraps, the food trial starts over!!
9. If marked or complete resolution in the itchiness and clinical signs occurs during the elimination diet trial, food allergy can be suspected.
10. To confirm that a food allergy exists and that the clinical improvement was not just coincidental, the animal must be challenged with the previously fed food ingredients and a relapse of clinical signs must occur, it usually take between 1 hr and 14 days
11. Once a food allergy is confirmed, the elimination diet should be reinstated until clinical signs resolve, which usually takes less than 14 days
12. At this point, previously fed individual ingredients should be added to the elimination diet for up to 14 days. If pruritus recurs, the individual ingredient is considered positive for having a causative role in the food allergy. If itchiness does not recur, the individual ingredient is not considered important in causing the clinical signs.
13. Once the offending allergens are identified, control of the food allergy is by strict avoidance.
14. Concurrent diseases (such as atopic dermatitis or flea allergy) may complicate the identification of underlying food allergies.
15. Infrequently, a dog will react to new food allergens over time

Frequently asked questions about dietary elimination trial

Q: What are the most common food allergens?

A: Beef, chicken, wheat, corn, soy, dairy, egg, and fish.

Q: How is a food allergy diagnosed?

A: After careful consideration of your pet's previous diets the veterinary will direct you to an appropriate home cooked or commercial pet food.

Q: What about lamb, the dog food bag says it is hypoallergenic?

A: In spite of advertising claims, lamb is not always hypoallergenic and can be implicated in food allergy if fed over a period of time, likewise to other ingredients fed over time. In fact, in Great Britain, where lamb or mutton is commonly fed, lamb is the major cause of food allergy in dogs and cats.

Q: My pet has been eating the same food for a long time, could it still be food allergic?

A: Since most commercial pet foods contain approximately the same ingredients, and most animals with food allergies have been eating the same diet for some time, changing (or not changing) the brand of food does not typically alter the symptoms.

Q: What if my pet accidentally eats another pet's food or table scraps?

A: The food trial starts over, even occasional transgressions in the food trial can seriously hinder our ability to make the diagnosis of a food allergy. Make sure that all family members and visitors to your home know that your pet is eating a prescription diet.

Q: How will I know the diet is working?

A: Your pet will no longer relapse with secondary infection or suffer from pruritus by the end of the 8-12 week dietary trial.

Q: I already have my pet on a grain free diet, is this adequate for a food trial?

A: In the published list of known food allergens there are both protein and grain allergens. The veterinarian will specifically direct you to appropriate home cooked or commercially available diets.

Q: Are there any treats I can give?

A: Nothing but the new food and water are to pass the lips of a patient on a food trial.

Q: What about the flavored heartworm prevention I give my pet?

A: The heartworm prevention is even changed to a non-flavored product. Current options are unflavored Heartgard® tablets or topical products such as Revolution® or Advantage Multi®. Please discuss changes with your family veterinarian.

Q: If my pet improves on the test diet, do I have to continue to feed it for the rest of his or her life?

A: Not necessarily. The veterinary prefers to institute a food challenge to specifically pinpoint the offending food allergens. This is helpful for two reasons:

1. Question/concern would arise if your pet would someday become allergic to the protein in the hypoallergenic diet and
2. Ease and cost of obtaining a limited ingredient pet food (example: corn free diet if your pet is corn allergic).

Q: How will I know exactly what food my pet is allergic to?

A: The veterinarian will direct you through a food challenge at the end of the 8-12 week hypoallergenic diet trial. This entails adding specific ingredients individually to your pet's hypoallergenic diet according to a calendar. Most patients will have an adverse reaction, such as a flare of red, itchy skin, within 24-48 hours of being exposed to the offending allergen, but some patients may take up to 10 days.

Q: How will I know my pet is having a reaction to a food ingredient?

A: Usually within hours to just a few days your pet will have relapsed with skin problems as it was prior to feeding the new diet.

Q: Can there be more than one ingredient my pet is allergic to?

A: Usually there is just one ingredient, on occasion a patient will have multiple food allergens. For this reason, you should proceed with the entire challenge set forth by the veterinary.