

Food Allergies and Food Intolerance

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Food allergies account for about 10% of all the allergies seen in dogs. It is the third most common cause after [flea bite allergies](#) and [atopy \(inhalant allergies\)](#). Food allergies generally account for 20% of the causes of itching and scratching in dogs. Food allergies plus atopy account for another 20%.

The entire process of a pet being sensitized to a particular agent in food and the complicated antibody response that occurs in the intestinal tract in pets with food allergies are not very well understood. Despite our lack of understanding of the actual disease process, there are many things that we do know including the symptoms, how to diagnose food allergies, and also how to treat them.

Food allergies affect both dogs and cats. Unlike atopy, there is no strong link between specific breeds and food allergies. Food allergies affect both males and females and neutered and intact animals equally. They can show up as early as five months and as late as 12 years of age. Many animals with food allergies also have concurrent inhalant or contact allergies.



Food allergy or intolerance?

There is a distinction that needs to be made between food allergies and food intolerances. Food allergies are true allergies and show the characteristic symptoms of itching and skin problems associated with canine and feline allergies. Food intolerances can result in diarrhea or vomiting and do not create a typical allergic response. Food intolerances in pets would be similar to people who get diarrhea or an upset stomach from eating spicy or fried foods. Fortunately, both food intolerances and allergies can be eliminated with a diet free from offending agents.

Common food culprits

Several studies have shown that some ingredients are more likely to cause food allergies than others. In order of the most common offenders in dogs are beef, dairy products, chicken, lamb, fish, chicken eggs, corn, wheat, and soy. As you may have noticed, the most common offenders are the most common ingredients in dog foods. This correlation is not a coincidence. While some proteins might be slightly more antigenic than others, many proteins are similar in form and the incidence of allergic reactions are probably associated with the amount of exposure.

Symptoms

The symptoms of food allergies are similar to those of most allergies seen in dogs and cats. The primary symptom is itchy skin affecting primarily the face, feet, ears, forelegs, armpits and the area around the anus. Symptoms may also include chronic or recurrent ear infections, hair loss, excessive scratching, hot spots, and skin infections that respond to antibiotics but reoccur after antibiotics are discontinued. There is evidence that dogs with food allergies may sometimes have an increased incidence of bowel movements. One study showed that non-allergic dogs have around 1.5 bowel movements per day where some dogs with food allergies may have 3 or more per day.

It is difficult to distinguish an animal suffering from food allergies from an animal suffering from atopy or other allergies based on physical signs. However, there are a few signs that increase the suspicion that food allergies may be present. One of these, is a dog with recurrent ear problems, particularly yeast infections. Another, is a very young dog with moderate or severe skin problems. A third tip off, is if a dog suffers from allergies year-round or if the symptoms begin in the winter. And the final clue, is a dog that has very itchy skin but does not respond to steroid treatment.

Diagnosis

The diagnosis for food allergies is very straightforward. But due to the fact that many other problems can cause similar symptoms and that many times animals are suffering from more problems than just food allergies, it is very important that all other problems are properly identified and treated prior to undergoing diagnosis for food allergies. Atopy, flea bite allergies, intestinal parasite hypersensitivities, [sarcoptic mange](#), and yeast or bacterial infections can all cause similar symptoms as food allergies. Once all other causes have been ruled out or treated, then it is time to perform a food trial.

Food trials and elimination diets: A food trial consists of feeding an animal a novel food source of protein and carbohydrate for at least 12 weeks. A novel food source would be a protein and carbohydrate that the animal had never eaten before. Examples would include be rabbit and rice, or venison and potato. There are a number of such commercial diets available on the market. In addition, there are specialized diets that have the proteins and carbohydrates broken down into such small molecular sizes that they no longer would trigger an allergic response. These are termed 'limited antigen' or 'hydrolyzed protein' diets. Homemade diets are often used, as the ingredients can be carefully restricted. Regardless of the diet used, it must be the only thing the animal eats for 12 weeks. This means no treats, no flavored medications, no rawhide or pig's ears; absolutely nothing but the special food and water. In addition, the dog should not be allowed to roam, which may result in him having access to food or garbage.

Food Trial Tips

Only the recommended diet must be fed.

Do NOT give:

- Treats
- Rawhides
- Pigs Ears
- Cow hooves
- Flavored medications (including heartworm preventives) or supplements
- Flavored toothpastes
- Flavored plastic toys
- Any type of food when giving medications

If you want to give a treat, use the recommended diet. (Hint: canned diets can be frozen in chunks or baked, and these can be used as treats.)

If possible, feed the other the same diet as the patient. If not, feed other pets in an entirely different location than the patient, and do not allow the patient access to that food.

Do not allow the dog access to the cat's litter box.

Keep your pet out of the room at meal times. Even a few small amounts of food dropped on the floor or licked off of a plate can void an elimination trial and require you to start over. Wash the hands and faces of any children after they have eaten.

Do not allow your pet to roam. Keep dogs on leashes when outside.

Keep a journal in which you can record the date and any foods, treats, etc. your pet may have accidentally eaten.

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Veterinarians used to recommend that a pet only needed to be placed on a special diet for 3 weeks but new studies show that in dogs, only 26% of those with food allergies responded by day 21. However, the vast majority of pets responded by 12 weeks. Therefore, it is very important to keep the pet on the diet for the entire 12 weeks. If the dog shows a marked reduction or elimination of the symptoms, then the animal is placed back on the original food. This is called 'provocative testing' and is essential to confirm the diagnosis. If the symptoms return after going back

on the original diet, the diagnosis of a food allergy is confirmed. If there has been no change in symptoms but a food allergy is still strongly suspected, then another food trial using a different novel food source could be tried.

Blood Testing: There is no evidence that blood tests are accurate for the diagnosis of food allergies. Veterinary dermatologists insist that there is no merit in these tests whatsoever in the diagnosis of food allergies. The only way to accurately diagnose food allergies is with a food trial as detailed above. While the intradermal skin testing is excellent for diagnosing atopy (inhalant allergies) it is ineffective for food allergies. While specialized blood tests can be used to help in the diagnosis of atopy, they have no benefit in diagnosing food allergies. In our review of all the current books and articles on veterinary dermatology and allergies, we could not find a single dermatologist that endorsed anything other than the food trial as an effective diagnostic aid. If you want to diagnose and treat food allergies you must do a food trial.

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Treatment

The treatment for food allergies is avoidance. Once the offending ingredients have been identified through a food trial, then they are eliminated from the diet. Short-term relief may be gained with [fatty acids](#), antihistamines, and steroids, but elimination of the products from the diet is the only long-term solution. The owner of the animal has two choices. They can choose to feed the animal a special commercially prepared diet or a homemade diet.

If the owner chooses to feed the homemade diet, then they can periodically challenge the pet with new ingredients and determine which ingredients are causing the food allergy. For example, if the animal's symptoms subsided on a diet of rabbit and potatoes, then the owner could add beef to the diet for two weeks. If the animal showed no symptoms, then they could then add chicken for two weeks. If the animal began to show symptoms, then it could be assumed that chicken was one of the things the pet was allergic to. The chicken could be withdrawn and after the symptoms cleared up, a different ingredient could be added and so on until all of the offending ingredients were identified. A diet could then be formulated that was free of the offending food sources.

If homemade diets are used, it is essential that they be balanced, with correct amount of ingredients, vitamins, and minerals. Homemade diets for such long term use should be developed by a veterinary nutritionist.

Be aware that some pets with food allergies may develop allergies to new foods if they are fed those foods long enough. If you see signs of food allergies returning, consult your veterinarian.