



## FOOD ALLERGY

**Also Know As:** Food hypersensitivity, food intolerance

**Transmission or Cause:** The causes of food allergy are individual allergens within the animal's food, usually protein sources or carbohydrates. It is suspected that certain preservatives or food additives may elicit an allergic reaction.



**Affected Animals:** Dogs, cats, and humans. Any age, sex, or breed of dog or cat can develop food allergies.

**Overview:** Ingredients in some pet foods may cause an allergic reaction in hypersensitive cats and dogs. Reactions are characterized by itching and/or gastrointestinal disorders, and are usually responses to a protein or carbohydrate source in the diet. Food allergies are the third most common cause of itching, and account for about 10 to 15 percent of all allergic skin diseases in canines. Unlike animals with seasonal inhalant allergies, animals with food allergies tend to itch year round, and do not experience much relief from anti-itching medications. Therefore, it is essential to identify and remove the type of food that is stimulating the allergic response. Some animals will have other allergies concurrently, such as fleabite hypersensitivity and inhalant allergies, which have severe symptoms when they are not controlled.

**Clinical Signs:** The only consistent sign of a food allergy is pruritus, or intense itching, which typically continues throughout the year and fails to respond well to corticosteroid treatments. Various skin lesions may also occur, but there is no characteristic pattern of lesions associated with food hypersensitivity. The ears, axillae (hollow areas under the front leg at the shoulder), groin, and feet are affected more commonly than other body parts. Food allergic dogs commonly present with recurrent ear infections in one or both ears. The clinical signs of food allergies in cats are more variable than in dogs. Cats may have miliary dermatitis, raised bumps with bloody scabs, or eosinophilic granulomas, which look like elevated, open sores on the skin. Vomiting, diarrhea, and more frequent but formed bowel movements can be noted in some cases.

**Description:** A food allergy is an allergic reaction to a substance within an animal's diet. Generally, the allergen is a protein or carbohydrate source. Food allergy is strongly suspected if the first signs of itching start before the dog is six months of age or older than six years. Animals can have more than one type of food allergy. The exact mechanism of the disease is not completely understood. Food allergies can affect the skin by causing itching and sometimes skin lesions. The ears, feet, the hollow area under the front leg at the shoulder, and groin are affected most commonly, although any part of the skin can itch. The gastrointestinal tract may react to the allergens as well; vomiting, diarrhea, and an increased number of normal bowel movements per day are typical symptoms. An elimination diet is fed exclusively to the animal in order to diagnose definitively the food allergy. Food trials are performed to determine the allergen or multiple allergens causing the animal's reaction, so that the veterinarian can prescribe a tolerable diet. Some animals may develop new allergies with time, but their diet can be reformulated as necessary.

**Diagnosis:** Before food allergy can be diagnosed, other causes of itching and skin disease, such as flea bite hypersensitivity and inhalant allergies, will need to be ruled out as possible causes of the itching and gastrointestinal disorders. The best tool for definitively diagnosing food allergy is a food elimination diet, selected to contain a single protein and carbohydrate source to which that the animal has not been previously exposed. Blood testing for food allergies is not accurate. The best elimination diet is a home cooked diet, however many animals will also respond well to prescription hypoallergenic diets. The special diet must be fed exclusively for a minimum of 6-12 weeks. If they have a food allergy, most animals will begin to show signs of improvement within four weeks of the diet, but will require feeding of the elimination diet for a longer time in order to eliminate symptoms. Following the elimination diet, the original food is fed to the animal to confirm that it does incite an allergic reaction. If the animal is allergic to it, the return of clinical signs will occur within 10 days of restarting the original diet. Once the food allergy has been established, the exact allergen is investigated by placing the animal on the elimination diet until it is free of allergic symptoms. Subsequently, single food ingredients are added to the elimination diet and the animal is assessed for an allergic reaction. This process is repeated for each ingredient. Commonly suspected allergens include beef, chicken, fish, and lamb meats; eggs and dairy products; and carbohydrate sources such as corn, wheat, soybeans, or rice.



**Prognosis:** The prognosis an animal with food allergy is good if the allergens can be found and eliminated from the animal's diet. Some animals will develop new food ingredient allergies with time, and hence will need to have their feeding protocol adjusted as necessary.

**Treatment:** The allergen must be identified and removed from the animal's diet. If present, secondary skin infections are controlled using antibiotics or antifungal treatments. Concurrent allergies must also be controlled. Anti-itching medications may be used in the initial stages of treatment, but generally these drugs are not effective for curing food allergy symptoms, and have to be discontinued to allow correct assessment of food trials.

**Prevention:** Avoidance of allergens is the only known preventative measure. No treats or other foods should be fed to an animal with a food allergy. Because flavored medications such as vitamins and heartworm prevention may cause an allergic reaction, replacement with non-flavored pills is recommended.