

What's Eating Them? Food Allergies.

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Allergies account for more itchy skin than any other disease in dogs. There are three distinct types of allergies (see sidebar), but one in particular - reaction to foods - has become a growth industry ever since the advent of "hypoallergenic" diets. This suggests that food allergies are common. Nothing could be further from the truth.

If you take all allergic dogs and divide them into groups based on the reason for their itch, a significant number will have fleas, another large segment will suffer from atopic allergies, but only a lowly 2% or so will have food allergies.

A food allergy is an adverse immune reaction to a specific component of the diet. By definition, it can be managed solely by excluding the offending food. Though the solution seems simple, diagnosing a food allergy can be difficult.

Skin testing, in which multiple allergens are injected into the skin surface, can be used for atopic allergens but is unreliable for food allergies. Some researchers maintain that antibodies against specific antigens (food ingredients) can be detected

in the blood. But the relevance of these tests has come into question; it seems antibodies to certain foods can be found in normal (nonallergic) individuals, too. According to some specialists, the available blood tests do not represent good value for the money. Veterinarians must rely on other methods, proceeding step by step.

When working with an itchy dog, the veterinarian first must rule out skin parasites and infections as possible causes. Internal parasites also should be treated. Once these possibilities are eliminated, allergic skin disease (for any reason) is probably. Reviewing the dog's medical history is crucial: If an atopic allergy is suspected, treatment should be administered to see if the condition improves.



German Shepherd dog/cf/finland/istockphoto.com

Food allergies are relatively rare and can be easily confused with atopic allergies or itchiness caused by fleabites.

But if a dog's itchiness peaks after consuming a certain food ingredient, it suggests a food allergy. Clinical signs of food allergies normally involve just the skin, but a small subgroup of allergic dogs also develops intestinal symptoms. The itch from a food allergy is not seasonal like an atopic allergy; it occurs at any time of year. The itch may be localized on the face, ears, and feet, but it can occur all over the body.

A Dalmatian I knew reliably developed a red face and ears each time he ate even the tiniest piece of carrot. That was an easy diagnosis, but most are not as obvious. And most allergies develop in response to ingredients that have been in the diet for years, not new additions.

Harvesting a small sample of skin and sending it to a pathologist for a skin biopsy can sometimes confirm a food allergy. But the only way to *positively* diagnose a dietary allergy is through a food trial.

The principle of the test is simple: You must feed the dog a diet consisting of a single protein and single carbohydrate not found in his current diet. The goal is to avoid ingredients that are currently being fed. For example, if your dog is normally given a food containing lamb and rice, you would have to switch to a protein ingredient such as fish, turkey, rabbit, elk, or kangaroo, along with a carbohydrate such as yams, potatoes, or beans. (No single diet works in all dogs, and experimentation is often needed.) The new food should be fed for a minimum of two weeks, and preferably four, before deciding if signs of an allergy have resolved, even partially.

Absolutely *no* snacks or treats can be fed during the food trial. Replacing tap water with bottled water is probably not necessary, but food and water bowls should be ceramic or stainless since dog can be allergic to plastics. The trial food can be commercially made or homemade - the choice is based on convenience and personal preference. Some dogs seem to tolerate home-prepared diets, but not the commercial equivalent. The reason for this is unknown: it may be due to changes in the ingredients during processing, or it may be due to additives that could cause an adverse reaction, but this has not been proven.

Due to the added effort in preparing homemade diets, many owners (over 50% in one study) fail to complete dietary trials. Also, these diets are not nutritionally complete and should not be given long term or fed to growing puppies. If the trial diet is continued for an extended time, supplementation will be necessary.

If the dog's itch disappears with the new food, it confirms a food allergy. Once the dog is stable and the itch has abated, single ingredients can be incorporated back into the diet one at a time to find out which can be fed and which must be avoided.

In a Golden Retriever patient that had been fed a chicken-and-rice food, I managed to control the itch with a trial homemade diet consisting of white fish and sweet potato (50:50). Once we got her comfortable, we began adding other foods to her diet. We quickly found out that she was horribly allergic to chicken. Over time, we transitioned to a commercial food containing primarily fish and potato.

If the itch continues after the food trial and a food allergy is still suspected, you can try a diet with different ingredients. Or you may need to reassess and work with your veterinarian to find another reason for the itching.

Other Causes of Allergies

Besides food sensitivity, there are two other causes of skin allergies in dogs - fleas and atopy.

Fleas are usually easy to see and diagnose. The itch is often concentrated above the tail, but it can be anywhere on the body. The allergic reaction is actually to flea saliva injected into the dog as the flea feeds.

Fleas and flea allergies are weather-dependent. If you have an itchy dog and it's February in Colorado, chances are he doesn't have fleas. If it's an itchy dog in Florida, fleas are a definite possibility. Fleas allergies are treated very easily by using a topical insecticide that kills the fleas before they bite.

Atopic allergies account for the biggest share of allergies in dogs. These are reactions to allergens such as house dust and dust mites, pollens, fungi, and molds. There is debate on how the allergens cause the itch. The traditional theory is that they are inhaled, pass through the lungs into the bloodstream, and eventually find their way to the skin. The other thought is that they settle on the skin and migrate between the skin cells to the lower skin layers (the dermis). Either way, there is a reaction of that allergen with an antibody that triggers the release of histamine, causing the itch.

Atopic allergies can be diagnosed with intradermal skin testing, where allergens are injected into the skin to look for reactions. They are treated with medication (antihistamines, cyclosporine, prednisone) and with allergy injections (hyposensitization). Some breeds of dogs are predisposed to allergies, suggesting there is an inherited tendency for this skin condition.

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