

## BASIC INFORMATION

### Description

A food allergy is a reaction to food by the body's immune system. Food allergy is different from food intolerance (such as lactose intolerance) or other adverse reactions to food (such as dietary imbalances, toxicity, or irritation from ingested foreign bodies) that do not involve the immune system.

### Causes

In most situations, protein in the food causes the immune reaction. Often the protein source is from animals (such as meat, eggs, or dairy products), but occasionally a carbohydrate source can also be involved. Common foods that induce allergies in dogs include beef, chicken, dairy products, wheat gluten, corn, and soy protein. In cats, common foods that induce allergies include beef, fish, wheat gluten, corn, and dairy products. Dogs and cats can be allergic to more than one food ingredient in a diet.

### Clinical Signs

Itching, licking, and chewing of the paws, flank, groin, neck, and ears are common signs. Cats often scratch their faces and ears. The itching occurs during all seasons of the year. Some dogs may have recurrent ear inflammation or infections. Gastrointestinal signs such as chronic vomiting, diarrhea, belching, and frequent bowel movements may also occur. It is common for both skin signs and gastrointestinal problems to be present in the same animal, and these problems tend to persist or recur.

### Diagnostic Tests

No single, specific test exists that can diagnose a food allergy. Although allergen blood testing is available, these tests are not very accurate and are not a predictably reliable way to diagnose a food allergy or to determine the ingredients to which your dog or cat may be allergic. It is important to provide our veterinarians with a thorough and complete history of all foods and treats your dog or cat eats, including table scraps, chew toys, and medications that are chewable or contain flavorings.

## TREATMENT AND FOLLOW-UP

### Treatment Options

A dietary food trial may be used to diagnose a food allergy. A food trial involves feeding an elimination diet for 2 to 4 months. The ideal elimination diet includes a new, highly digestible

protein source, moderate protein content, and no food additives. Elimination diets include a homemade diet, a commercial diet containing a novel (never fed before) protein and/or carbohydrate source, or a commercial diet composed of hydrolyzed (broken into fragments) protein.

Homemade diets can be formulated by a veterinary nutritionist and are usually composed of a single protein, carbohydrate, and fat source. During the initial food trial phase, the diet does not have to be complete and balanced; however, if your dog or cat responds to this diet, it will need to be balanced if it is given for longer than 2 to 4 months.

Diets with unusual sources of protein and carbohydrate (duck and potato, white fish and rice, venison and potato, rabbit and green peas) can be obtained commercially that are complete, balanced, and designed to be fed long term.

Hydrolyzed protein diets contain proteins that are broken down into pieces that are too small to stimulate the immune system. These diets typically contain a single carbohydrate and fat source and are formulated to be complete and balanced for adult dogs and cats.

During the food trial, no other foods or treats can be fed, including table scraps. Medications that contain flavoring should be changed or discontinued. Your pet must be watched closely to make sure it does not get into the garbage, eat things outside, or obtain food from children in the house, neighbors, or friends. Although an elimination diet must be fed for at least 2 to 4 months, many clinical signs improve in about 6 weeks. Depending on the severity of the clinical signs, medications may initially be needed to decrease itching and inflammation or to treat any secondary bacterial skin infections.

### Follow-up Care

For dogs and cats that respond to the initial elimination diet, the diet can be continued if it is complete and balanced and formulated to meet the requirements of an adult dog or cat. If a homemade diet has been given, then further consultation with a veterinary nutritionist may be needed to ensure that the diet is balanced and can be used long term. Eventually, many medications given to relieve signs of the allergy can be discontinued.

### Prognosis

Prognosis for treating a food allergy is good as long as the dog or cat is not re-exposed to the food ingredient or ingredients that trigger the immune response.