

## **Food Allergy Trials in Dogs**

### **Objectives**

What are some of the signs of a food allergy?  
How does your veterinarian select a diet for a food allergy trial?  
What diets are currently available for a food allergy trial?  
What pitfalls can occur during a food allergy trial?

### **What Signs can be seen with a Food Allergy?**

A food allergy is a reaction to food that involves the body's immune system. It is usually always a protein particle in the food that is responsible for reactions. Your dog may itch, lick, and chew paws, flank, groin, neck, and ears. The itching can be during all seasons. A small percentage of food allergy dogs may only have chronic otitis. The dog may also have some gastrointestinal signs such as chronic vomiting, diarrhea, belching, and frequent bowel movements. Food allergy dogs often have both varying degrees of skin signs and gastrointestinal problems that persist.

### **How Does your Veterinarian Select a Diet for a Food Allergy Trial?**

With this information an appropriate diet can be selected for the food trial. Your veterinarian will first want a complete medical history. The most important information you will need to provide is a thorough history of what foods and treats your pet has eaten. This includes table scraps and chew toys with food flavorings.

The diet selected will contain a "novel" protein and carbohydrate source meaning that your dog has not eaten this protein source in the past. Your veterinarian may recommend a food allergy trial based on skin and possible gastrointestinal signs.

### **What Diets are Currently Available for a Food Allergy Trial?**

Commercial diets sold "over the counter" may claim to be "hypoallergenic" or "good for sensitive skin." It is important to realize these claims have no official meaning. These diets can be misleading because the pet food companies do not have to list every ingredient on the label. Close inspection of the label can identify inappropriate proteins and the manufacturer can substitute other ingredients as long as they meet the guaranteed analysis. It is best to use the diet your veterinarian has selected for a proper food allergy test.

### **Diets that are used in food allergy trials are in one of these categories:**

Prescription Diets: Prescription diets are made by pet food companies to specifically and always contain the same ingredients. The protein source and carbohydrate source never change in these food allergy diets. These diets are only available through veterinarians. They are formulated to treat a medical condition, in this case, food allergies.

Low Antigen Diets: The protein(s) in a diet that can be responsible for food allergy signs are called antigens. Low antigen diets are also prescription diets. In these diets, the protein has been formulated (hydrolyzed) to be so small that it will not stimulate the immune system. The diet may also have used small carbohydrates as well to avoid the potential immune response to proteins in the carbohydrate component of the diet.

### Home Made Diets

Some of the current examples of these diets made by specific pet food companies are listed below. Again your veterinarian will need to carefully evaluate your dog's dietary history and any other current medical issues to select the best diet for the food allergy trial.

- Dr. Rowena D'Monte • Dr. William Langhofer • Dr. Makenzie Kurth • Dr. Joseph Lockhart
- Dr. Daniel Fonza • Dr. Irina Vera • Dr. Erin Greenwood • Dr. Heather Riedy
- Dr. Nicole Winterwood • Dr. Emma Kulkarni

Hill's Prescription Diets:

D/D canned/dry- salmon & potato/rice  
D/D canned/dry- duck & potato/rice  
D/D canned/dry- venison & potato/rice  
D/D dry- egg & rice  
D/D canned- lamb & rice

Low Antigen Prescription Diets:

Z/D Ultra Allergen Free dry and canned-hydrolyzed chicken and refined starch  
Z/D Low Antigen -dry and canned-hydrolyzed chicken and single source carbohydrate (potato)

Purina Prescription Low-Antigen Diets:

LA Limited Antigen dry-salmon and rice  
HA hypoallergenic dry-hydrolyzed soy

Iams Prescription Diets:

Response FP dry and canned-fish and potato  
Response KO dry-kangaroo, canola meal, and oat flour

Royal Canin Prescription Low-Antigen Diets:

Hypoallergenic HP 19 dry-hydrolyzed soy and rice

Prescription Diets: (IVD)

Potato and Duck dry and canned-duck protein and potato (also has light formula)  
Potato and Rabbit dry and canned- rabbit protein and potato  
Potato and Venison dry and canned- venison protein and potato (has large breed formula-dry)  
Potato and Whitefish dry and canned-whitefish protein and potato

If your pet will not eat one of the above diets, or has a concurrent medical issue that prevents the use of these diets, then a homemade diet may need to be used. Home made diets usually contain a novel protein source (for your pet) and a carbohydrate. A homemade diet recommended for your dog can not be fed long term. It can be fed for the length of a proper food trial without any concerns. It is not formulated to be a long term complete and balanced diet for your dog because it is deficient in necessary nutrients.

Your veterinarian may consult a veterinary nutritionist to formulate this diet. The diet initially contains only two ingredients: a protein source and a carbohydrate source. Some of the protein and carbohydrate sources a veterinary nutritionist may select from include:

<b>Protein Source</b>	<b>Carbohydrate Source</b>
Tuna	Yams
Salmon	Sweet potatoes
Pinto Beans	Pumpkin
Rabbit	Oats
Game Meats	Barley
Garbanzo (chickpeas)	Quinoa

## Common Food Trial Pitfalls

The hallmark of a successful food trial is feeding only the prescribed diet for the required period of time. There are many pitfalls that can occur during a food allergy trial. These pitfalls must be avoided or the food allergy trial will be inconclusive. You and your veterinarian will be unable to determine whether your dog does indeed have food allergies.

### The most common pitfalls in food allergy trials include:

1. The client does not understand why the veterinarian has recommended a feeding trial, how the feeding trial will be conducted, their role in completing the food allergy trial properly, and the ultimate goals of the trial.

#### Solutions:

Your veterinarian must communicate the specific reasons for conducting a food allergy trial and outline how to complete a proper food allergy trial. Expectations and goals should be clearly expressed.

Schedule request recheck exams and/or phone progress reports

The veterinarian should provide other sources of current information about food allergies and food allergy trials.

The owner should feel comfortable asking questions throughout the trial.

2. Feeding your dog any type of snack or chew toy with food flavoring can affect the length and success of the food trial. This mistake may not be just the owner, but can include visitors, relatives, delivery men and children.

#### Solutions:

Use pieces of the dry kibble (if a dry diet is used for the food trial) in a Kong to provide snacks, entertainment and chewing.

If a canned diet is fed, take slices of the canned diet and bake them into dry snacks.

Inform visitors that your dog is on a strict diet and cannot be given any other foods except the diet that has been prescribed. Give visitors prescribed kibble or your baked can treats to feed.

When visitors crate the dog or put the dog in a place with no access to visitors.

Family members must understand the food allergy trial and realize the importance of absolutely no snacks.

If senior relatives are home with the dog, send the dog to play groups or take the dog to work if possible. Give the relative only acceptable treats. Again, relatives must be a part of the effort to complete the food allergy trial.

3. In a multiple pet house you must prevent the patient from eating the other dog's food. If there is a cat in the household, eating the cat food will disrupt the food trial.

#### Solutions:

Stand over the dogs or separate the dogs when they are fed.

Feed the other dogs(s) a very palatable diet that they will eat immediately. This may limit leftover food for the patient to get into. Still, remember the feces will need to be picked up immediately. Even a small lick of an inappropriate food can potentially be a pitfall in a food allergy trial.

If possible, put all the dogs on the new diet.

Put the cat food up out of the dog's reach. Place the cat food in a room a small enough entrance that only the cat can gain access to the food.

Avoid or stop free feeding all pets in the household so inappropriate food access is controlled.

4. The dog is given flavored medication such as chewable heartworm pills, flavored antibiotics or anti-inflammatories. The dog may also be given a flavored vitamin mineral supplement, joint supplement or coat supplement.

#### Solutions:

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Flavored heartworm preventatives will be replaced by an acceptable unflavored pill, topical, or possibly an injection.

Be sure to ask your veterinarian before giving any supplements or medications during a food allergy trial.

If your dog is treated at an emergency clinic where the veterinarian is not familiar with your dog's history, be sure to let them know the dog is currently on a strict food allergy trial. Inform them what diet the dog is eating.

5. The dog is not confined and wanders. This patient will be able to get into the garbage, compost piles or the neighbor may feed him treats.

**Solutions:**

Keep your dog inside.

Be sure your own garbage is not within the dog's reach.

6. You do not want to continue with the feeding trial because you do not see any improvement in your dog's condition.

**Solutions:**

Schedule an examination with your veterinarian to discuss your concerns. Your veterinarian has recorded the initial signs and reasons for starting the food trial. Your veterinarian may note and document improvements in your dog. These improvements may be slower than you would prefer or expected. Your veterinarian can give you more information and the encouragement you need to complete the food trial.

Take photographs of your dog before you start the feeding trial and then biweekly to monitor your dog's progress. You can also keep a diary if the dog has had gastrointestinal reactions to food.

You must be aware that a complete food trial can take 12 to 16 weeks so your patience and persistence are needed.

7. You read or were told by a friend that there is a blood test for food allergies in dogs.

Currently these tests are not accurate and are not reliable. They can not be used to select an appropriate diet for your dog. A food allergy trial is the only way to determine if your dog has food allergies.

A positive food allergy trial can improve your dog's itching and/or gastrointestinal signs. This means your veterinarian now has a way to treat and manage your dog with an appropriate diet and treats. After the trial you will have the option of continuing the prescription diet. If a home made diet has been used in the food trial, and you and your veterinarian would like to continue that feeding plan, the diet must be balanced. Your veterinarian will confer with a veterinary nutritionist to balance the diet. When the trial home made diet is complete and balanced, it can be your dog's diet forever.

If you elect to try and find an "over the counter" dog food rather than the prescription or homemade food trial diet, you and your veterinarian can conduct a food challenge test. A new ingredient is added to the successful diet and the dog's response is followed. If there is no return of the original skin or gastrointestinal signs, the dog is not allergic to that ingredient. After testing several new ingredients, your veterinarian or a veterinary nutritionist can select a commercial diet you can safely feed your dog.

Food allergy trials are the only available means to determine if your dog has food allergies. Current diet options are listed above. The trial can be long and difficult. Outlined are many of the common pitfalls and ideas to avoid them. With a team approach, you and your veterinarian can successfully complete a food allergy trial. If a food allergy trial works, then the long-term treatment for the health of your dog is an appropriate diet.