## Food Allergy Trials in Dogs

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### Food Allergy Trial Objectives

- 1. What are some of the signs of a food allergy?
- 2. How does your veterinarian select a diet for a food allergy trial?
- 3. What diets are currently available for a food allergy trial?
- 4. 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 the protein source in the food that is responsible for reactions. The offending protein in a food or treat that causes an immune reaction is called an antigen. 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?

When a food allergy is suspected, 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.

It is important for your veterinarian to obtain a complete food history to select an appropriate diet for the food trial. The diet selected will contain a novel (different) 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 signs and possibly of gastrointestinal signs.

What Diets are Currently Available for a Food Allergy Trial?

Commercial diets sold over the counter (OTC) 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 has also been shown that OTC diets contain contamination during manufacturing, which is legal as they are not produced for food trials. It is best to use the diet your veterinarian has selected for a proper food allergy test.

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

- Therapeutic novel protein diets
- · Hydrolyzed or low antigen therapeutic diets
- · Homemade diets

Therapeutic diets are made by pet food companies to specifically and always contain the same ingredients without contamination. The protein source and carbohydrate source do not change in therapeutic food allergy diets as they are formulated to treat a specific medical condition; in this case, it's food allergies.

Therapeutic diets with a novel protein may be recommended as it has as the protein source is something your pet has never consumed; therefore, the term "novel" protein diets. These therapeutic diets are only available through veterinarians. They are carefully formulated to treat a medical condition, in this case, food allergies.

The protein(s) in a diet that can be responsible for food allergy signs are called antigens. Hydrolyzed (formulated) or low antigen diets are also therapeutic diets. In these diets, the protein has been formulated 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 part the diet. Similar to the novel protein diets, the low antigen or hydrolyzed therapeutic diets are only available through your veterinarian as they are treating a medical condition.

Again, your veterinarian will need to carefully evaluate your dog's dietary history and any other current medical issues to select the best therapeutic diet for the food allergy trial.

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. Homemade diets usually contain a novel protein source (for your pet) and a carbohydrate. A homemade diet recommended for a food trial can be safely fed for the length of a proper food trial, but is not fed long term. It is not a complete and balanced diet for your dog and will be 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 nutritionist may select from include:

#### Protein sources:

- Tuna
- Tilapia
- Salmon
- Pinto Beans
- Rabbit
- · Game Meats
- · Garbanzo (chick peas)

#### Carbohydrate sources:

- Quinoa
- Yams
- Sweet potatoes
- Pumpkin
- Oats
- Barley
- Couscous

#### Common Food Trial Pitfalls

The hallmark of a successful food 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. Without a proper food allergy trial, 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 the following.

- 1) You do not understand why your veterinarian has recommended a feeding trial, how the feeding trial will be conducted, your role in completing the food allergy trial properly, and the ultimate goals. If this is the case, ask your veterinarian more questions until you are certain that you understand why you're trying it and why one snack or tidbit can negatively affect your efforts.
  - Your veterinarian must communicate to you the specific reasons for a conducting a food allergy trial, and outline
    how to complete it properly. Expectations and goals should be clearly expressed.
  - Schedule recheck exams and/or phone progress reports.
  - Your veterinarian should provide other sources of current information about food allergies and food allergy trials.
  - You should feel comfortable asking questions throughout the trial.
- 2) Feeding your dog any type of snack, treat, or chew toy with food flavoring can affect the length and success of the food trial. This mistake may be made not just by the owner, but can include visitors, relatives, delivery men and children.

- Use pieces of the dry kibble (if a dry therapeutic diet is used for the food trial) in a toy designed to deliver kibble 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 canned treats to feed.
- When visitors come to the house, 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, the entire household 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 or cat's food. Eating cat food will disrupt the food trial.
  - Stand over the dogs or separate the dogs when they are fed.
  - Feed the other dogs(s) a palatable diet that they will eat immediately. This may limit left over food for the patient to get into.
  - If you have more than one pet at home, you will need to pick up all the feces immediately. Even a small lick of an inappropriate food including feces can potentially be a pitfall in a food allergy trial.
  - If possible, put all the dogs on the new therapeutic diet.
  - Put cat food up and out of the dog's reach. Place it in a room with 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.
  - Flavored heartworm preventatives will be replaced by an acceptable nonflavored pill or topical.
  - 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 therapeutic 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.
  - · 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.
  - Schedule an appointment with your veterinarian to discuss your concerns. Your veterinarian has recorded the initial
    signs and reasons for starting the food trial and may note and document improvements. 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.
  - Be aware that a complete food trial can take 12 to 16 weeks (3 to 4 months), so your patience and persistence are needed.
- 7) You heard that there is a blood test for food allergies in dogs.
  - Currently these tests are not accurate, reliable, and are not considered useful in finding out if your dog has a food allergy. They cannot 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

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 may have the option of

continuing the therapeutic diet if appropriate. If a homemade 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; consult with a veterinary nutritionist to balance the diet. When the trial homemade diet is formulated by a veterinary nutritionist to be complete and balanced, it can be your dog's diet forever.

If you elect to try and find an OTC dog food rather than the therapeutic diet 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 and/or a veterinary nutritionist can select a commercial diet you can safely feed your dog.