## Diagnosing Food Allergies in Dogs: Elimination Diet Trials

Elimination diet trials can be tough! We're here to help. The **Canadian Academy of Veterinary Dermatology** would like to share some information and tips about this very important diagnostic step.

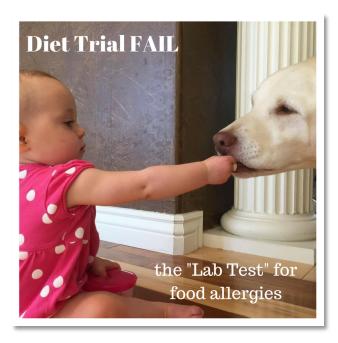
Your veterinarian has reason to believe that a "cutaneous adverse food reaction" – which we will simply call a "**food allergy**" – might be playing a role in your dog's skin or ear problems. By addressing this allergy, you can help your dog feel much better.

That's the good news! The bad news is that there is no accurate skin or laboratory test for food allergies in pets. And a dog with a food allergy looks just like one with environmental allergies and might, in fact, have both. Currently, the **only** way to diagnose a food allergy is using an **elimination diet trial**.

The elimination diet trial (also called a "hypoallergenic" diet trial) is an 8-week test period when your dog can eat one thing, and one thing only: the food recommended by your veterinarian. **Any** other food, even a tiny treat, can affect the results of the trial. To give your dog the best chance of responding, you must be 100% strict with the trial for the full 8 weeks. We know that this is easier said than done!

What happens during those 8 weeks? If your dog has a food allergy, you will see a gradual 50% to 100% improvement in his condition, depending on whether other allergies are present. After 8 weeks, your veterinarian may ask you to return to your dog's regular food and treats to see if his symptoms return. This step is called a **dietary challenge**, and is only done after your veterinarian has reassessed your dog. The challenge is recommended because many other factors (medications, season changes) can contribute to your dog's improvement during those 8 weeks.

#### We're often asked the following questions:



#### I haven't changed the food recently and my dog's poops are perfect; could he still have a food allergy?

Yes! In fact, most dogs with food allergy have eaten their food 2 years or longer. And it's very common for the allergy to affect **only** the skin or ears.

## **How common are food allergies?**Estimates vary, but about 20% of dogs w

Estimates vary, but about 20% of dogs with allergic skin disease have a food allergy.

#### What could my dog be allergic to?

Almost anything! Food allergy is an inappropriate reaction of the immune system against a normal – and perfectly safe – food ingredient called an "allergen". The most common allergens are proteins in food, which are abundant in meats but also

found in grains, fruit, and vegetables. Common allergens for dogs include beef, dairy, chicken, and wheat. But there are many others!

#### What is an Elimination Diet?

Simply put, it's any food that we think doesn't contain the ingredients that your dog may be allergic to. Elimination diets, also called "hypoallergenic" diets, fall into two categories: novel ingredient diets and hydrolyzed diets.

A **novel ingredient** diet is made from foods that your dog has never eaten. This makes the ingredients new, or "novel", to his immune system. The immune system usually tolerates these ingredients because there hasn't been time for an allergy to develop. A novel ingredient diet can be veterinary kibble or wet food, or a home-prepared food, based on your veterinarian's recommendation and your preference. Although they can be very effective, there are a couple of drawbacks to novel ingredient diets. It can be difficult to find ingredients that are truly novel if a dog has already "eaten everything on the Ark". And we suspect that in some cases, dogs can cross-react to ingredients that they have never eaten. For example, some dogs allergic to beef may show symptoms when



fed lamb or venison, even if they have never eaten these meats.

A **hydrolyzed** diet is made with ingredients that are broken down (hydrolyzed) in a way to make them very small. These tiny fragments are so different from the full-sized protein that they are much less likely to trigger an allergy. So even if your dog has an allergy to soy, he might safely be able to eat a food made from hydrolyzed soy. Hydrolyzed diets can be a good choice in dogs that have eaten a wide variety of foods and treats.

In addition to being hypoallergenic for your dog, the food must also be one that he digests well and eats happily for 8 weeks. Each dog is different, so sometimes we have to try a few different foods before we get it right!

### What treats can I give during a diet trial?

None, unless they are specifically made to accompany the recommended food. Don't assume that treats with a hypoallergenic label will be suitable. Even the tiniest amount counts: the flavouring in a single monthly heartworm pill is enough to set off an allergy. Think of a child with a peanut allergy. Would you give them "just one" peanut? Want to

#### **Pitfalls**

These common items can be the reason for elimination diet trials to fail:

- cheese or other foods used to hide pills (even if labeled hypoallergenic)
- rawhides, bullysticks, antlers, and other chews
- flavoured toothpaste
- chewable or flavoured medicines
- fatty acids such as fish oils
- joint supplements such as glucosamine and chondroitin
- gelatin capsules
- unwashed dishes, bowls, and cutlery
- "just a tiny piece" of food for a treat
- food dropped on the floor (we're looking at you, toddlers!)

show your dog some love during the diet trial? See the Tips for Elimination Diet Trials below.

#### Can I feed fruit or vegetables?

Fruit and vegetables can sometimes cause allergic reactions too. Don't assume they will be OK. Set your dog up for success by being as strict as possible!

## Can I use a pet store food to diagnose a food allergy? How about a grain-free or raw diet?

We recommend using veterinary diets or home-prepared foods for the elimination diet trial. Studies show that some store-bought foods can contain small amounts of ingredients not listed on pet food labels, making them unsuitable for the 8-week elimination diet trial period. Grain-free diets are not effective for elimination diet trials unless your dog only has a known grain allergy. And because we rarely know what your dog is allergic to when we start the diet trial, we would miss many food allergies by simply switching to a grain-free diet. Raw foods are not recommended for diet trials. They don't work any better than their cooked counterparts, and pose health risks to your dog and your family.

#### Will I need to feed the recommended diet forever?

In most cases, no. Even if your dog has a food allergy, your veterinarian can often recommend foods other than the trial diet that will work for long-term feeding. And of course, if your dog does not improve by 8 weeks, there is no reason to continue the food.

#### Why is the diet trial so long?

It takes a long time for the skin to normalize after a food allergen is removed. A diet trial lasting 8 weeks will diagnose about 95% of food allergic dogs. On the other hand, a trial lasting 4 weeks will diagnose only about half.

#### How can I find out exactly what my dog is allergic to?

If your dog reacts to his previous food or treats, you might wish to find out exactly which ingredients caused the problem. Your veterinarian can guide you through a sequential process (provocation) that involves adding individual suspected food allergens to the diet for up to two weeks at a time.

#### **Tips for Elimination Diet Trials**

- **Tough love.** You will need to be strong when confronted with those big brown eyes asking for a treat. Think of the possible health benefits for your dog. Or imagine a peanut-allergic child asking for a peanut butter cookie!
- Take it slow. Don't switch to the new food overnight. It's a recipe for refusal and stomach
  upset. Take at least one week (or longer) to make the transition, starting with a very small
  amount of the new food on day one. Start the 8-week countdown on the first day you feed
  only the elimination diet.

Example Transition Schedule							
Day	1	2	3	4	5	6	7
Current diet %	90	75	50	50	25	25	-
New diet %	10	25	50	50	75	75	100

• **Don't give up.** Though we always recommend a food that we think is best for your dog, what your dog actually thinks matters most. Call your veterinary team if you encounter food refusal, diarrhea, or any other problems. Veterinary diets are guaranteed, so the food can be returned and replaced with another if your dog doesn't like it.

- "Good dog!" Make the food into a treat by putting it into your dog's cookie jar and using it as a reward. If your dog gets food from the kitchen counter or table, have a stash of the food at these locations. You can even hide it in a food-dispensing toy to make it more fun for your dog. As your veterinary team for other tips on rewarding your dog.
- No stealing! Feed your dog separately from other pets to make sure he doesn't sneak into their bowls.
- Don't mix and match. Stick to one type of food during the trial. For example, don't add a venison canned food with a hydrolyzed dry food. No one food is 100% hypoallergenic for every dog, so feeding more than one type increases the chance of "missing" a food allergy.
- Oh no, pills? If you struggle to give oral medications to your pet, ask your veterinarian about alternatives such as injections or topically applied treatments, or even delaying the diet trial.
- Let your pack know. Your dog may
  have an entourage: children,
  neighbours, dog walkers, dog
  daycare staff, pet store staff, and
  members of your family. They need to know about the diet trial!
- Plan ahead. Purchase the food well in advance of when you will run out.
- Stay clean. Keep the food in its original packaging, or thoroughly wash the container you use for storing the food.
- **Keep track.** Keeping a calendar of your pet's symptoms, medications, and food can really help us figure out what's working, and what's not.
- **Don't panic!** If you make a mistake, it's OK. Record it on the calendar and keep going with the diet trial.
- **Stay strong.** For the sake of your dog's health, do your best to stick with the trial for the whole 8 weeks. Call your veterinary team with questions, or to ask for help.

Every dog is different. We know it takes patience and effort to complete an elimination diet trial. But if your dog has a food allergy, your persistence can make a world of difference to his quality of life. Hang in there!

# Elimination Diet Trial reminders

- Your veterinary team is the best resource for a food recommendation, and for answering any questions along the way.
- Do your best to ensure your dog's success: make sure he eats nothing but the recommended food for the whole trial.
- It's 8 weeks. You can do this!

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