# FOOD ALLERGIES IN DOGS

Diagnosing and treating a dog food allergy or dog food intolerance is one of the most common problems faced by dog owners.



# Your dogmay develop food allergies at any stage of its life.

heMerck∜eterinary Manual ∠

For a pet owner, seeing your dog itching and scratching can be a cause for worry. Itching is a common complaint among dog owners and there are many causes for this including flea bites (flea allergy dermatitis), seasonal allergies or atopy, contact dermatitis, sarcoptic mange, and food allergies [3].

Food allergies are the 3rd most common cause of itching (skin disease) in dogs and it consists of 10-15% of all allergic skin diseases in dogs [5]. It has been reported in dogs 2 months to 14 years old [6] which mean that your dog may develop food allergies at any stage of its life. Also, most adverse food reactions begin when dogs are less than 1 year old [6]. While in adults, food allergy develops if they are fed the food allergen for >2 years [2,6] which means that if your adult dog's diet has an ingredients that it is allergic to, it will take over 2 years of feeding before you see signs of food allergy.

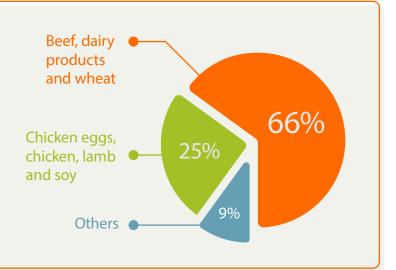
There is no sex predilection for diet-related allergy in dogs so both male and female dogs have the same chances of getting it. There were some reports, however, that there are dog breeds that have greater risk of developing food allergies. So if your dog belongs to one of these breeds (shown in the graph), it might be best to consider feeding your dog a less allergenic diet.





# What foods are dogs commonly allergic to?

The most common food or food ingredients that have been found to cause allergies in dogs are beef, dairy products, and wheat. These three ingredients account for two thirds of reported cases in dogs. Chicken, chicken eggs, lamb, or soy accounted for twenty five percent of the dogs with diet-related skin allergy [1].



# Signs and symptoms of food allergy in dogs

If your dog is suffering from food allergy, you can observe:

Azestfor Homemade Diets are tailored to meet your dog's individual needs, and this means that his diet is free from ingredient(s) that can trigger his food allergy, is nutritionally balanced and nutritionally complete.



# Diagnosis of Food allergies

The diagnosis of food allergy is difficult and time consuming. At the present time, intradermal skin testing, ELISAs, and RASTs for food allergy are considered unreliable in animals. The only way to determine if your dog is really suffering from food allergy is by doing the following steps:



### **Step 1: Food Elimination Trial**

In this stage, our aim is to know if the food that we are feeding contains an ingredient(s) that our dog is allergic to.

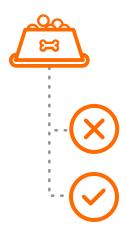
- Two weeks before starting the elimination trial, list down the foods the dogs is eating and the clinical signs observed (e.g. itching, redness of the skin, etc.)
- Have your dog checked and treated by a vet for other possible causes of allergy (flea, mites or atopy) and for secondary causes of itching (yeast infection or bacterial infection)
- Choose a home-prepared or commercial food to be used as the elimination diet. The elimination diet should be tailored to the individual and take into account the dietary history of the dog. It must consist of substances that the dog has not been previously exposed to before, must not contain additives such as colorings, flavorings or preservatives, and must be nutritionally balanced and nutritionally complete. An elimination diet usually consists of a novel protein source (lamb, filleted whitefish, canned tuna fish in water, rabbit, venison, turkey, ostrich, yams, pinto beans) and a carbohydrate source (rice, potatoes) [2].

Suggested Azestfor Homemade Recipes:

Duck, Chickpeas & Carrots / Cottage Cheese & Rice / Venison, Kale & Potato

- Feed appropriate formulation (elimination diet) for at least 4-6 weeks; keep a daily diary of what the dog eats and clinical signs observed.
- If you don't see any improvement in the dog's clinical signs then it is unlikely that his skin disease problems were caused by an allergy to food. Switch to a different protein and carbohydrate source and continue the food trial.
- If you see some improvement, continue feeding the elimination diet for another 4 weeks (it usually takes 12-13 weeks for maximum improvement of the clinical signs). If after another 4 weeks of feeding, partial improvement continues, then your dog's condition may not be caused by an adverse reaction to its original food or that he/she also is also affected with other allergic conditions (atopy, flea allergy) in conjunction to food allergy [1].
- If you observe a dramatic improvement in the clinical signs of your allergic dog, you go ahead and feed your dog his/her original diet or individual proteins (to identify which particular food ingredient/s your dog is allergic to), we proceed to doing the Challenge Trial.

Many clients prefer to stay on a successful food instead of risking a relapse by pursuing a challenge test. This is okay as long as the allergenic foods or ingredients are identified and avoided. New allergies can arise in the future, including allergies to novel proteins.



# Step 2: Challenge trial

The aim is to confirm that a food allergy exists and that the clinical improvement was not just coincidental, the animal must be challenged with the previously fed food ingredients and a relapse of clinical signs must occur [6].

- Feed your dog with his/her original diet (previously fed food ingredients).
- If the itching does not recur after the challenge test, the individual ingredient is not considered important in causing the clinical signs.
- If the clinical signs of the allergy will return (in 1 hour to 14 days), this confirms that something in the diet is causing the signs. Proceed to step 3 which is the Provocation Diet Trial.



### Step 3: Provocation Diet Trial

Our purpose in doing this step is to identify which particular ingredient your dog is allergic to.

- In this test, add single ingredients to the elimination diet. Test ingredients include a full range of meats (beef, chicken, fish, pork, lamb), a full range of grains (corn, wheat, soybean, rice), eggs, and dairy products [5].
- For each ingredient, the feeding proceess should last up to 10 days or less if signs develop sooner.
- If your dog is allergic to the ingredient, you will see your dog develop signs of allergy (e.g. itching, skin lesions). Dogs will usually develop signs within 1-2 days of feeding with an allergenic ingredient.
  - After this trial, you should be able to identify which ingredient(s) your dog has an allergy to. This will help in choosing the best food for your dog.

While the feeding trials are being done on your dog, there are some things you, the pet owner, must keep in mind to make the test result viable:

[5]

- Do not give your dog treats, chewable toys, vitamins, and other chewable medications (e.g. heartworm prevention medicines) that may contain ingredients from your dog's previous diet. Give only treats and toys that are made from known safe materials (e.g. apples, vegetables).
- Inform all of your family members of how the test works and what must be done to keep the test diet clean and free of any other food sources.
- Make sure that your dog's chewable vitamins and heartworm medications do not contain food substances that trigger allergies.

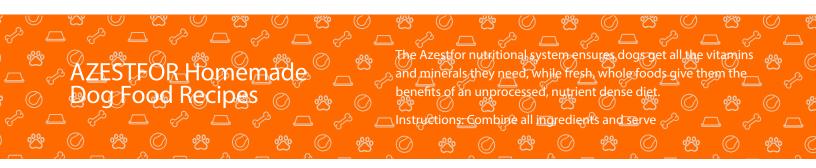
# What can I do for my dog that has food allergy?

If it has been proven that your dog is indeed suffering from food allergy and the food/ food ingredient he or she is allergic to has been identified, you must avoid giving any food substances that might trigger the clinical signs to return [5]. Your vet can recommend a commercial food based on the results of the challenge studies. Some food-hypersensitive dogs, however, cannot consume any commercial diet because of a reaction to the preservative [2]. In this case, you can give your dog nutritionally adequate home-prepared food, which is specially formulated for your allergic dog [1,2].



Azestfor Homemade Diets are tailored to meet your dog's individual needs, and this means that his diet is free from ingredient(s) that can trigger his food allergy, is nutritionally balanced and nutritionally complete.

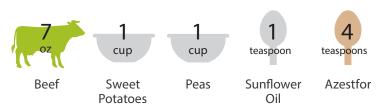
Azestfor Homemade Diets make sure your dog is itch-free and healthy so you and your dog can spend the best moments together.



### Lamb & Rice (2.5 cups)



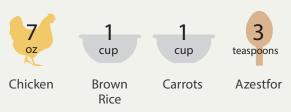
# Sweet Potato, Peas & Beef (3 cups)



# Chicken & Potato (2.5 cups)



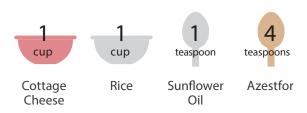
# Chicken, Brown Rice & Carrots (3 cups)



# Duck, Chickpeas & Carrots (3 cups)



# Cottage Cheese & Rice (2 cups)



# Chicken & Rice (2.5 cups)





Chicken

**Brown Rice** 

teaspoons

Azestfor

cups cup



Tofu, Black Eyed Peas & Rice (3.5 cups)

teaspoon



Tofu

Rice

Black **Eyed Peas** 

Sunflower Oil

Azestfor

# Venison, Kale & Potato (3 cups)



cup

**Potato** 

cup

Kale

teaspoons

Oil

teaspoons Sunflower

Azestfor

### Chicken & Oatmeal (2 cups)



Chicken



Oatmeal

teaspoons

Azestfor

# Chicken, Asparagus & Peas (3 cups)



cup





Chicken Asparagus Green Peas Azestfor

### Turkey, Pumpkin & Corn (3 cups)



Turkey

cup

Pumpkin

cup

Corn

teaspoons

Azestfor

# Bison, Peas & Carrots (3 cups)



Bison

cup

Peas

cup

Carrots

teaspoon

Sunflower

3 teaspoons

Azestfor

# Rabbit, Chickpeas & Carrots (3 cups)



cup

cup

teaspoons

Rabbit

Chickpeas

Carrots

Azestfor

# Lamb, Couscous & Cauliflower (3 cups)



Lamb

cup

Couscous



Cauliflower



Sunflower



Azestfor

# Chicken, Rice & Carrots (3 cups)



cup



teaspoons

Chicken **Brown Rice** Carrots Azestfor

# Fish, Quinoa & Broccoli (3 cups)



Salmon

Ouinoa



Broccoli



Azestfor

# Eggs, Macaroni & Broccoli (3 cups)





teaspoons

Azestfor

**Boiled Eggs** 

Macaroni

Broccoli

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# **HOMEMADE DOG FOOD VITAMINS**

# References:

- 1. Ettinger, Stephen J and Feldman, Edward C. Textbook of Internal Veterinary Medicine, 7th ed. Elsevier Health Sciences, 2009.
- 2. Miller, William Howard; Griffin, Craig E.; Campbell, Karen L; and Muller, George H. Muller and Kirk's Small Animal Dermatology, 7th ed. Elsevier Health Sciences, 2013.
- 3. "Pruritus." http://www.vcahospitals.com/main/pet-health-information/article/animal-health/pruritus- itching-and-scratching-in- dogs/861.
- 4. Thompson, Mary. Off to a good start: A manual for raising your new puppy. Adams Media, 1999.
- 5. Tilley, Larry Patrick and Smith, Francis W.K. The 5-Minute Veterinary Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Feline, 3rd ed. Lippincott Williams & Consult: Canine and Canine
- 6. White, Stephen D. "Overview of Food Allergy (Adverse Food Reactions)." The Merck Veterinary Manual. May, 2013.