



Pet Owner Allergy Guide

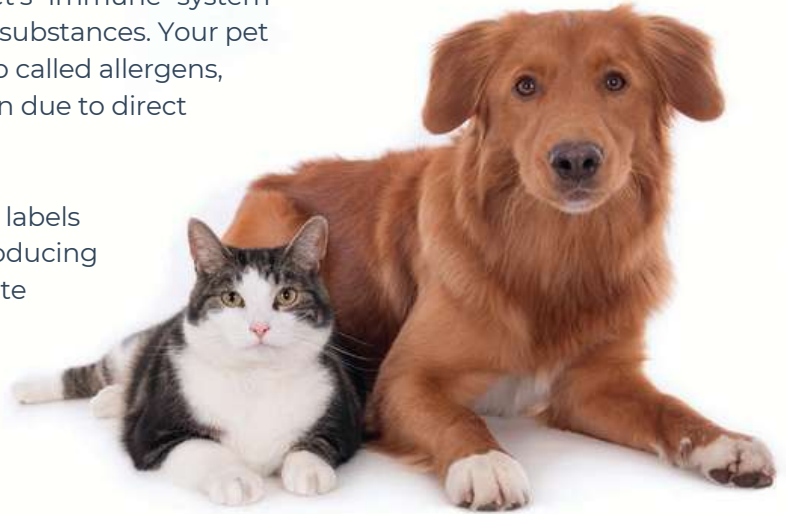
Understanding allergy and allergy management

What is allergy?

Just like humans, pets can also be allergic. The immunological mechanisms underlying allergy in pets are essentially the same as in humans.

Allergy is a disease in which your pet's immune system reacts abnormally to everyday harmless substances. Your pet can be exposed to these substances, also called allergens, by inhalation or ingestion, but most often due to direct contact of the allergen with the skin.

After exposure, the body recognises and labels these allergens as 'foreign' and starts producing inflammatory mediators which will initiate the allergic reaction.



How does my pet get allergies?

Allergies can be hereditary, but can also be developed over time after repeated exposure. In most animals, the initial signs of allergy start between 1 and 3 years of age.

Types of allergies

Some pets have more than one type of allergy, for example atopy and food allergy. The symptoms of these different types of allergies can be very similar, making it often hard to distinguish.

Atopy

Sensitivity to pollen, mites, moulds and skin cells of other animals

Food allergy

Sensitivity to components of the diet such as chicken

Flea allergy

Sensitivity to flea saliva

Contact allergy

Sensitivity to materials such as plastic, linoleum and paint

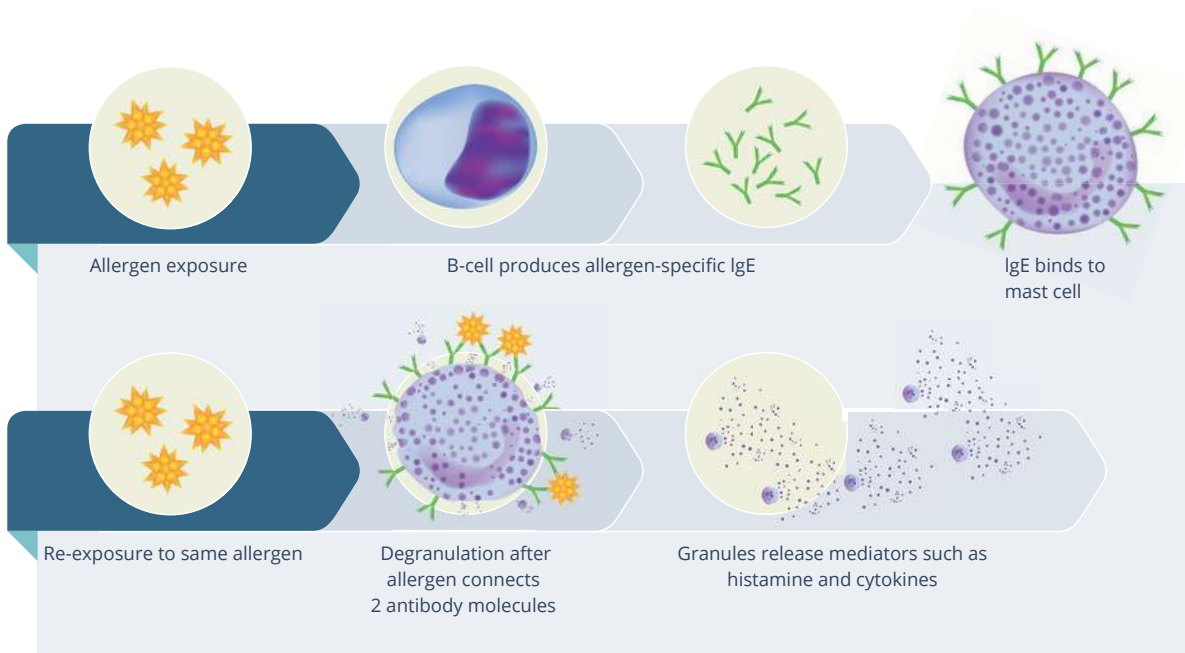
Drug allergy

Sensitivity to antibiotics, antiparasitics and other medicines

Pathogenesis

When an animal is in contact with an allergen for the first time, its immune system will react by producing IgE antibodies. These antibodies are specific for the allergen.

When the animal encounters these allergens again, the allergen will be presented to a mast cell which is already connected to the allergen-specific IgE. This leads to the production and release of mediators, such as histamine and cytokines.



Atopic dermatitis

Atopic dermatitis is a hereditary form of allergy where the animal is sensitive to airborne substances from the environment, such as pollen, mites, moulds and dander.

It is thought to be the most common form of allergy (10-15% of the dog population¹)

Any dog can develop atopy but certain breeds are at a higher risk. Such breeds include the Lhasa Apso, Schnauzer, Boxer, Labrador, Golden Retriever, Poodle, West Highland White Terrier, Cairn Terrier, Jack Russell, Fox Terrier, Cocker Spaniel, Dalmatian, Bulldog, English Setter, Irish Setter and Chihuahua.



Orchard grass



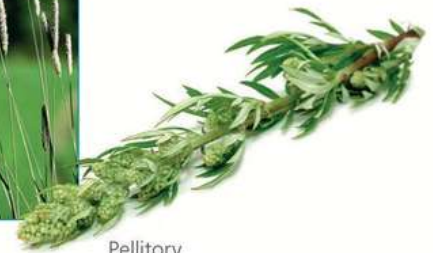
Rye grass, perennial



Fescue, meadow



Timothy



Pellitory



Nettle



Birch



Hazel



Mugwort



English plantain



English plantain



Willow



Hazel



Hay mite



House dust mite

What if my pet has atopy?

Atopy is one of the most common and important types of allergy in pets. Between 3% and 15% of dogs and 12.5% of cats suffer from atopy (also known as atopic dermatitis).

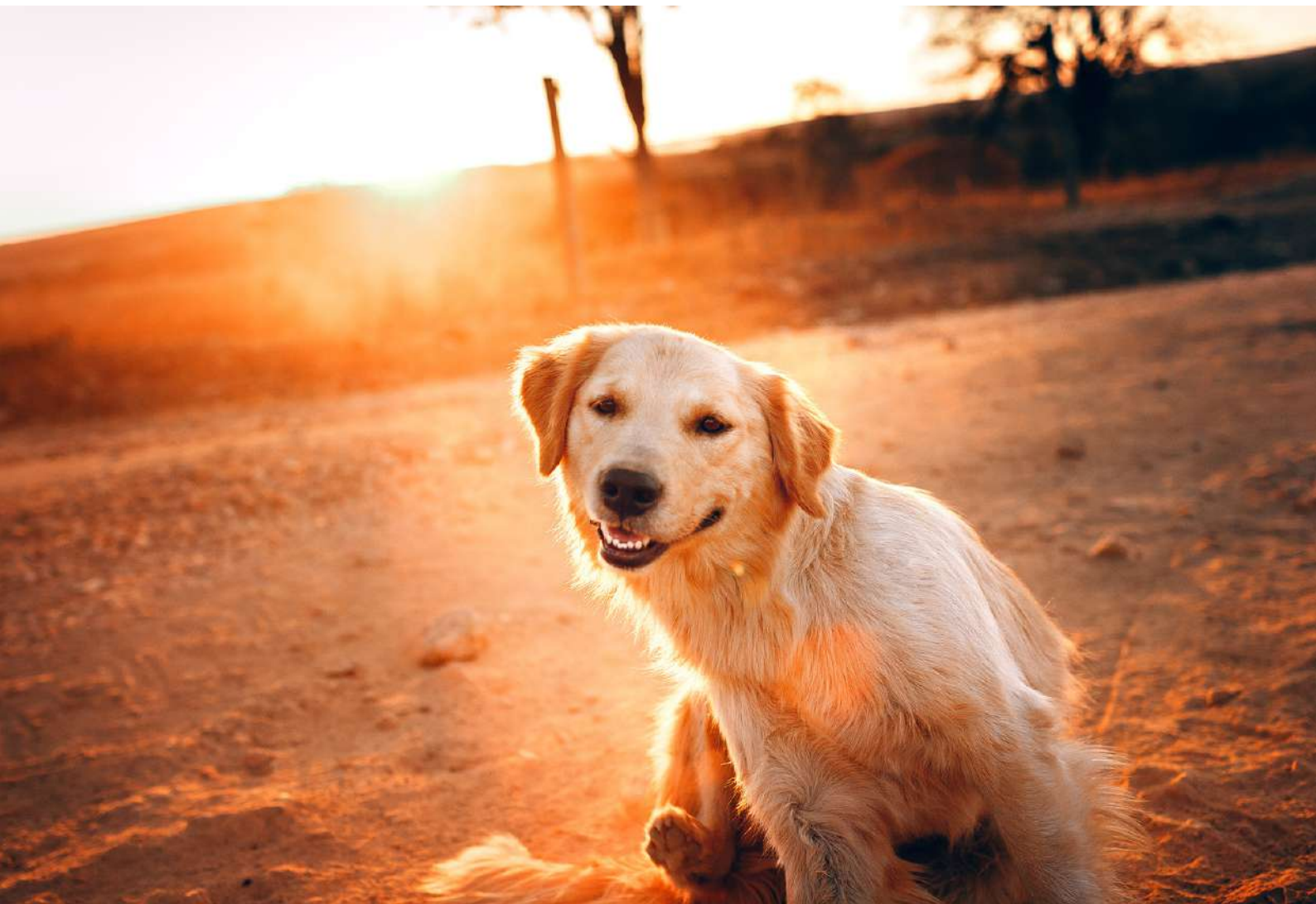
It is a hereditary allergy to substances from the environment such as pollen from plants (grasses, weeds and trees) dust and storage mites, molds and dander.

The first symptoms generally occur before the age of 3 years, but it is not uncommon in older dogs.

Dogs showing symptoms through the whole year will be mainly allergic to indoor allergens (e.g.: house dust mites, storage mites, dander and molds). Seasonal symptoms are mainly a result of an allergy to pollen (outdoor allergens). It often occurs that a pet is allergic to more than one of these allergens.

Certain breeds appear to be at higher risk of developing atopy:

- Lhasa Apso
- Schnauzer
- Alsatian
- Boxer
- Labrador
- Golden Retriever
- Poodle
- West Highland White Terrier
- Cairn Terrier
- Jack Russel
- Fox Terrier³



What are the signs of allergy?

The most common sign of allergy is itchy skin, which can lead to:

The usual locations of the itching are the belly, feet, base of tail, and face, especially around the eyes, mouth and ears. Occasionally, watery eyes, sneezing and coughing can be observed.

Allergy symptoms can be present through out the year or only during a season, depending on the allergens that trigger the allergic reaction, for example pollens are seasonal, while mites are present all year.



- Scratching, biting, and chewing at the skin
- Excessive face rubbing
- Excessive grooming
- Hair loss
- Recurrent ear infections

How do I know if my pet has allergies?

Not all itchy skin and scratching is due to allergies. There are many other conditions that can cause your pet to be itchy. Allergy diagnosis requires that the veterinarian first eliminates all other possible causes with similar symptoms.

Your veterinarian will exclude fleas, mites (such as scabies and demodex), bacterial, yeast and fungal infections. Although this work-up may seem extensive, it is absolutely necessary that these problems are diagnosed and treated before thinking of allergy.

If the allergy symptoms remain after excluding all other potential causes, the next step is to diagnose or exclude **food allergy**, through a food elimination trial. When food is also not the cause of the allergy, then **atopy** can be diagnosed.



Skin problems that have similar symptoms to allergies must first be excluded



Clinical signs

The most obvious sign of an atopic condition is itching. Itching is caused by inflammatory skin, typically on the paws, head, armpit or groin. Dogs often lick or bite their feet and can be seen rubbing their heads along the floor or other objects.

The skin inflammation can be exacerbated by bacterial (Staphylococcus) or yeast (Malassezia) infections.

Occasionally, atopic dogs will develop watery eyes, sneezing or asthma. Sometimes digestive symptoms appear. Allergy symptoms can be present throughout the year or only during a season, depending on the allergens that trigger the allergic reaction.

In most animals, the initial symptoms of atopy appear between 1 and 3 years of age.



- Itching
- Skin inflammation
- Ear inflammation
- Loss or discoloration of hair
- Watery eyes
- Sneezing

Ears

Appearance:

Waxy discharge; redness; odor

Behaviour:

Scratching or rubbing ears with paws or against furniture

Skin

Appearance:

Reddened; possibly with crusts or scales; odor with secondary infections

Behaviour:

Scratching and licking sides/belly, elbows, groin

Feet

Appearance:

Inflammation, redness, odor, brown discoloration where licking has occurred

Behaviour:

Licking and chewing of feet/pads

Face

Appearance:

Inflammation; redness; conjunctivitis; swelling

Behaviour:

Scratching or rubbing face with paws or against furniture

- + Otitis externa
- Recurrent pyoderma
- Watery eyes
- Sneezing
- Asthma

Hair& Coat

Appearance:

Bald spots; brown discoloration where licking has occurred

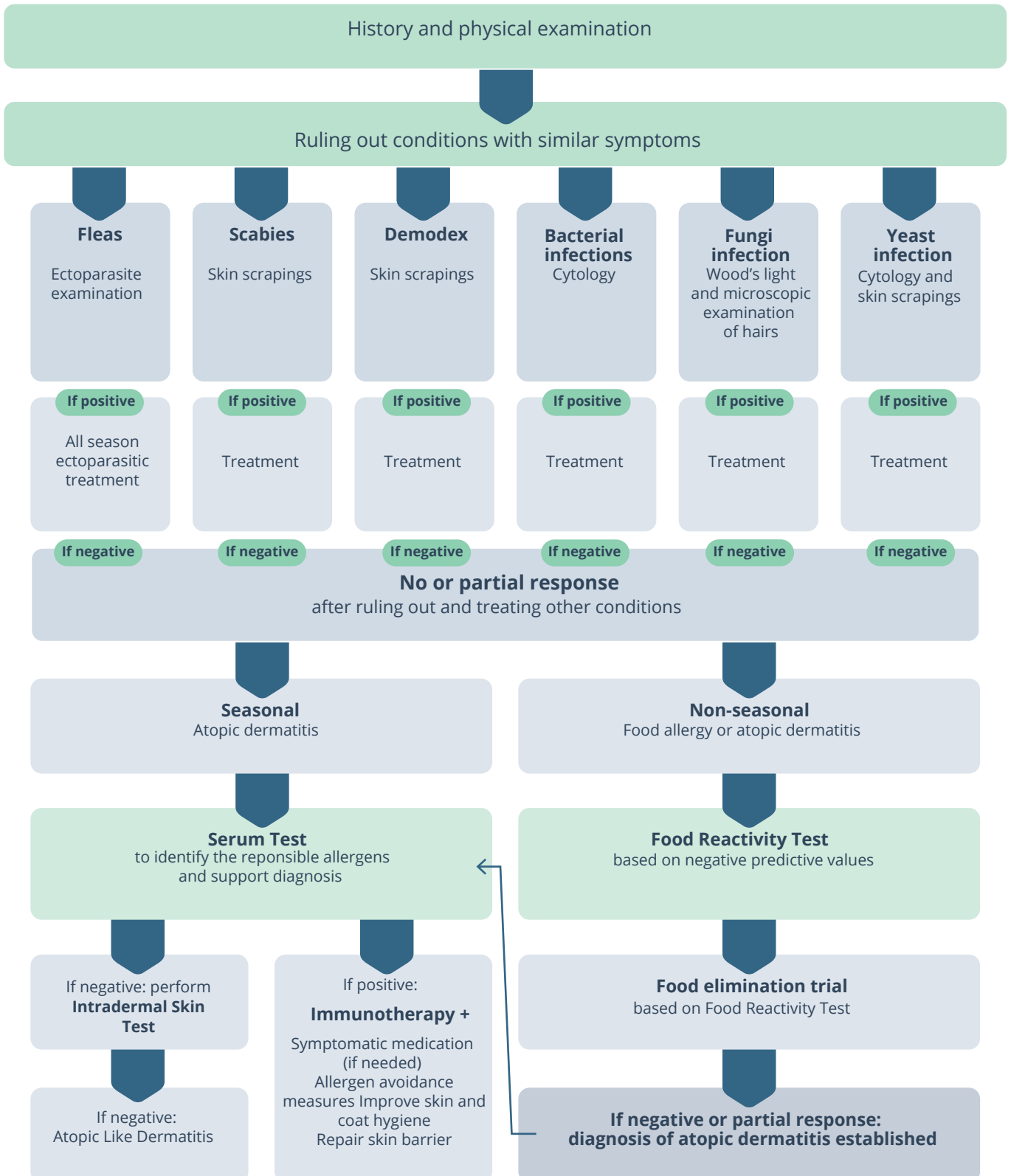
Behaviour:

Scratching sides/belly, rubbing face against furniture or carpet, licking



Diagnosing Allergy

The diagnosis of atopy should be based on the clinical history and by excluding other conditions that can present similar symptoms. Your vet will do an allergy work up, taking different steps to rule out other possible causes.



What Next?

Once a diagnosis of allergy has been made by ruling out other possible causes and looking at the history of the patient, an allergy test can be done to help identify what allergens are triggering the symptoms. Allergy testing can help form appropriate treatment plans.

Allergy testing can be done in one of two ways:

- **Serum Testing** - a sample of blood is taken and sent off to an allergy testing laboratory where they look for the presence of IgE against a selection of commonly found allergens
- **Intradermal Skin Testing** - a more specialist test that involves injecting very tiny concentrations of allergen directly into the skin and looking for a positive reaction characterised by weals that arise on the skin surface if the patient is sensitive to that allergen

It is important to be reminded that neither test is diagnostic and allergy must be diagnosed prior to the test. If the test shows a positive reaction to one or more allergens, the relevance of that allergen can be determined by looking at the clinical history and the animal's exposure to that allergen. In some cases, depending on when the allergy test is being conducted, it may be beneficial to do both a serum test and a skin test.



Allergy Testing



How allergy testing
helps with the
management of
allergy



ALLERGY TESTING YOUR PET

WHY ALLERGY TEST?

If your pet has been suffering with symptoms such as itchy reddened skin, recurrent skin or ear infections and fur loss, it is possible they may be suffering with allergies.

Having ruled out other causes of these symptoms, such as fleas and other skin parasites, your vet may recommend doing an allergy test.

Allergy testing is an effective way of finding out exactly which environmental allergens your pet may be allergic to.

By pinpointing the allergens that trigger your pet's symptoms, a suitable treatment plan can be implemented to help reduce the symptoms and prevent future flare-ups.



WHAT DOES ALLERGY TESTING SHOW?

Allergy testing will identify sensitivities to a variety of environmental allergens. These include both seasonal and non-seasonal allergens such as:



**Flower
Pollen**



**Weed
Pollen**



**Tree
Pollen**



Moulds



Fleas



Mites



Epithelia



ALLERGY TESTING YOUR PET

BENEFITS OF ALLERGY TESTING

Allergy testing will tell you which allergens your pet is sensitive to and help to better understand their disease and how to treat it.

By knowing the allergens, you may be able avoid or reduce exposure to them to help reduce symptoms. Your vet will also be better able to tailor a suitable treatment plan based on when your pet is likely to be symptomatic.

For example, if your pet has an allergy to flower pollen, you can predict when your pet's symptoms will flare up and plan treatment for that period. This may involve a short course of medication to reduce itching and topical therapy to prevent minimise symptoms during the flower pollen season.



WHY ALLERGY TEST YOUR PET



Prove what allergens your pet is sensitive to so exposure can be minimised



Predict when your pet will likely get symptomatic



Prepare financially for periods when symptoms flare up



Prevent secondary skin & ear infections by looking out for the early signs of infection



Plan effective treatment protocols



Proactively manage your pets allergy



ALLERGY TESTING YOUR PET

ALLERGY TESTING TO TAILOR TREATMENT

There are different treatments that can help manage the symptoms of allergy. Often, a multi-modal approach that combines treatments is recommended to manage these symptoms.

Treatments can help cure the underlying disease and manage the itching associated with allergy. Some treatments can help restore skin barrier function and manage and prevent secondary skin and ear infections.

Allergy testing can help formulate treatment plans that can manage the underlying cause of the disease eg immunotherapy. In addition, it can help determine for how long your pet may need other medications throughout the year.



TREATMENT OPTIONS



Allergen Specific Immunotherapy



Itch blocking medications



Skin shampoos, foams, wipes



Environmental Sprays



Ear Cleaners



Essential Fatty Acids



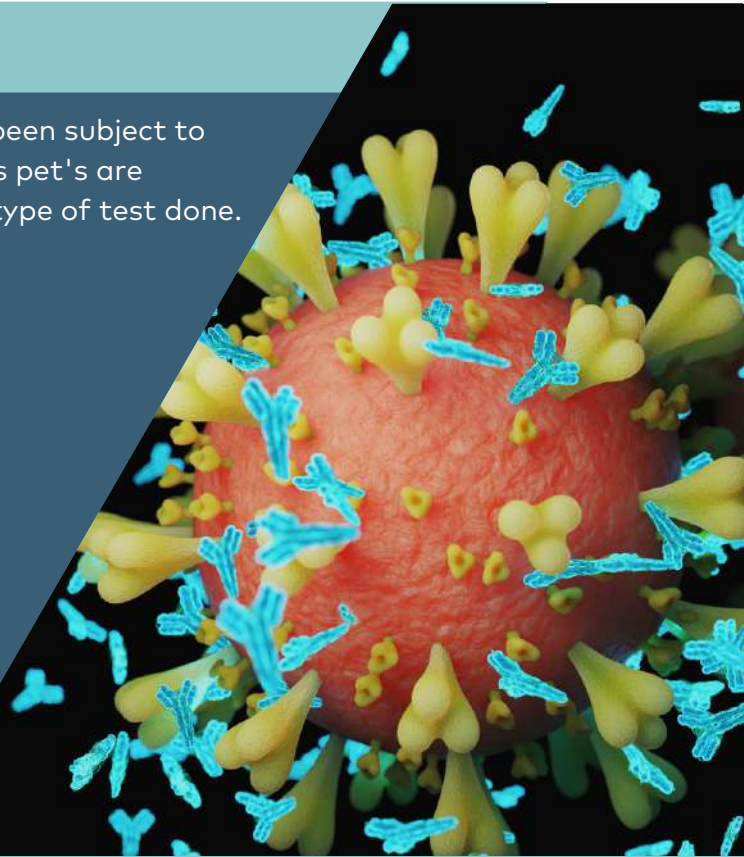
ALLERGY TESTING YOUR PET

IS ALLERGY TESTING RELIABLE?

Allergy testing techniques and methods have in the past been subject to criticism that they do not accurately show which allergens pet's are allergic to. How reliable an allergy test is depends on the type of test done.

Thanks to recent updates in allergy testing methodology, allergy serum testing which involves looking for IgE against environmental allergens in the animals blood, is now recognised as being very reliable. The latest test technology can show with a high degree of accuracy exactly which allergens your pet is sensitive to. Intradermal skin testing where allergens are injected into the skin, is also a reliable method undertaken by some vets.

Other forms of allergy test such as saliva or hair tests are proven to be unreliable and should not be undertaken.



ALLERGY TESTING FOR FOOD ALLERGY

Allergic symptoms in pets may also be caused by sensitivity to certain foods. This is called food allergy and it is important to rule out food allergy when working-up the cause of your pet's symptoms.

It is commonly accepted that allergy testing cannot be done to diagnose food allergy and the only way to prove a food allergy is to do an elimination food trial. This involves feeding your pet a novel protein source for 8-12 weeks and seeing if the symptoms improve.

If symptoms resolve or improve then food allergy can be diagnosed. If they don't then it is likely your pet is not food allergic or if they partially improve it indicates that your pet may also suffer from environmental allergies which they can then be tested for.

The value of serum testing for food allergy is that it can either help determine which foods you can provoke the animal with to look for clinical signs, or to help choose a suitable diet for use during the elimination food trial which does not contain foods they may be sensitive to.





ALLERGY TESTING YOUR PET

ALLERGY TESTING CAN HELP REDUCE LONG-TERM COSTS

Managing a pet with allergies is often life-long and treatment can be expensive. However, allergy testing may help reduce the long-term costs involved in managing an allergic pet.

Without knowing what exactly your pet is allergic to, you will not know when their symptoms are likely to start or how long they will last, especially if they are only allergic to seasonal allergens like pollen. As a result, expensive medications may be given for longer than they need to be as many can be reduced or withdrawn when allergens are not in season.

Allergy testing will also give you the option of doing Allergen Specific Immunotherapy (ASIT) which is considered the gold standard treatment for allergy. This involves an initial one off cost for a 10-month course of treatment that desensitises your pet to the allergens that trigger the allergic symptoms. ASIT is a lifelong treatment so there is a yearly one-off cost for each new vaccine but the majority of patients respond positively and as a result the dependence on other medications becomes less, saving you money over the course of your pet's life.

Allergen avoidance strategies which can be better implemented after doing an allergy test will also help reduce costs long term as they may help minimise symptoms and reduce flare-ups that require treatment. Many products that help with reducing exposure to allergens such as shampoos, foams, wipes and environmental sprays are lower cost and last months, so the cost is spread out.

Moreover, allergy testing allows you to better predict when your pet will likely get symptom flare-ups so you can financially plan for times of the year when treatment costs may rise.





ALLERGY TESTING YOUR PET

ALLERGEN AVOIDANCE

Another key benefit of allergy testing is that it can help you create allergen avoidance plans that help reduce your pet's exposure to the allergens they are sensitive to. For example, if the allergy test proves a positive sensitivity to house dust, it may be sensible to increase the frequency of vacuuming and bed washing. Your pet may also benefit from environmental sprays that reduce dust exposure. More frequent bathing can also help wash allergens off of the coat.

If your pet is shown to have allergies to pollen you may be able to alter walking routes to avoid the trees and plants that trigger a reaction. You can plan the timing of walks based on pollen count and can rinse their paws and coats after walks with easy-to-use foams and wipes.

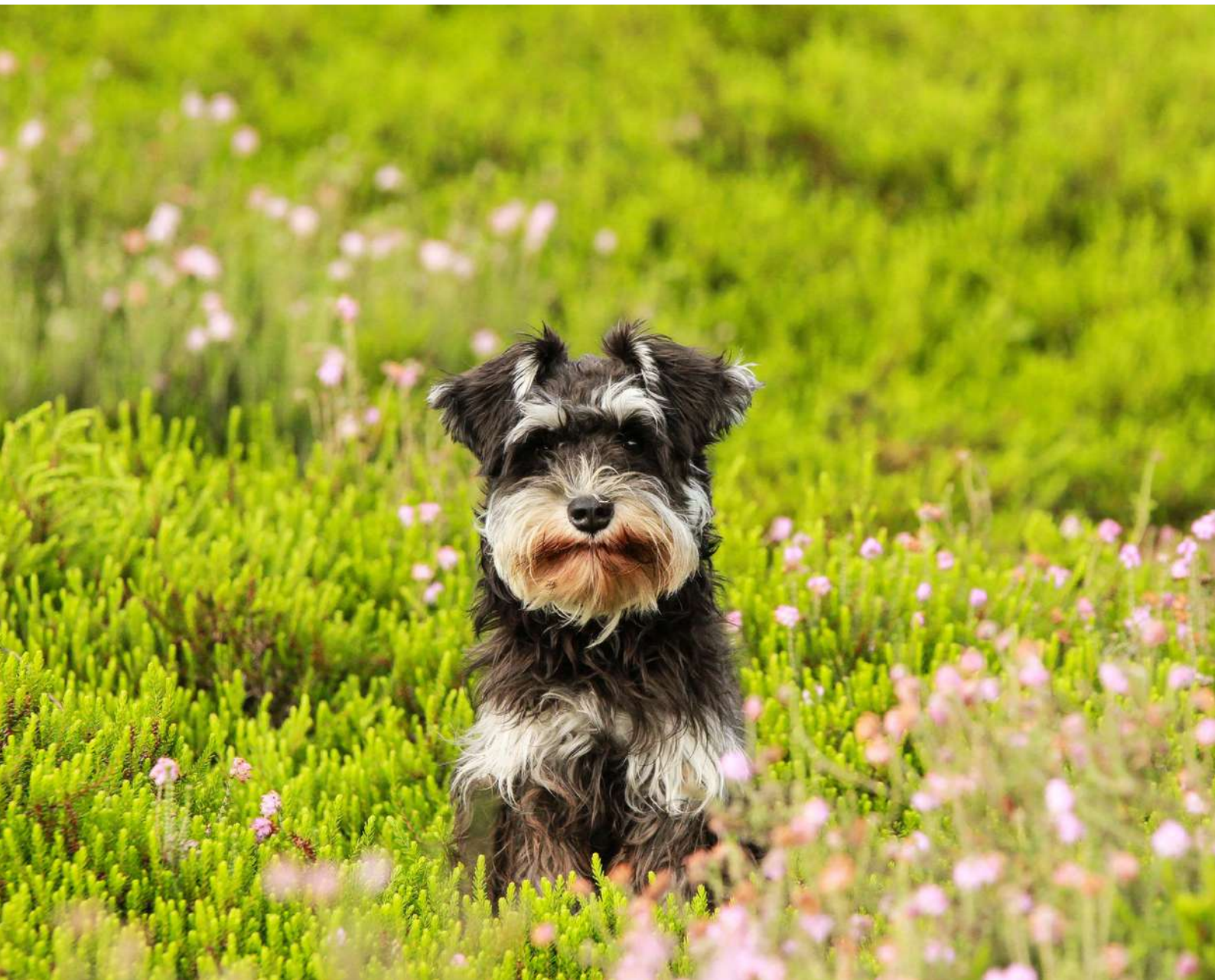


Allergen Exposure & Avoidance

The severity of your pet's symptoms can often depend on how much they are exposed to the allergens they are sensitive to.

Allergen avoidance involves taking certain measures that help reduce your pet's exposure to those allergens. In some cases, for example with food, avoiding the allergen completely may significantly reduce symptoms, or even cure the condition. However, in most cases involving environmental allergens like dust and pollen, although you may not be able to completely avoid those allergens, steps can be taken to reduce the level of contact the animal may have with them.

In this guide we will look at some common allergen avoidance measures.



Allergen Guide



Advice on reducing
exposure to common
environmental
allergens

Mites

These tiny spider-like insects are barely visible to the naked eye and found in almost every home all over the world. The droppings contain proteins that cause frequent and continuous allergic reactions in pets.

Mites thrive best in an environment with a high humidity and temperature. There are two main types of mites, house dust mites and storage mites.



House dust mites

House dust mites feed on skin flakes of humans and animals. Favorite areas are mattresses, bedding, upholstered furniture, carpeting and any other household fabrics, such as curtains and drapes.

Most common species

House dust mite

Dermatophagoides pteronyssinus



- Indoor allergen
- Allergy symptoms all year round

Because this house dust mite seems to be more abundant in Europe than in America, it is also called the European house dust mite.



Ideal humidity 70-85%



Ideal temperature 22-30°C

Farinae mite

Dermatophagoides farinae



- Indoor allergen
- Allergy symptoms all year round

Pets are most often allergic to this house dust mite. The Farinae mite is the little brother of the House dust mite or *Dermatophagoides pteronyssinus*.



Ideal humidity 70-85%



Ideal temperature 22-30°C



Tips to reduce exposure to house dust mites

Unfortunately it is impossible to eliminate all house dust mites in your home, but some things can be done to limit exposure.

1

Keep your pet out of your bedroom as mites love mattresses and bedding.

2

Consider using a mite-proof pet bed and encase bedding with mite-proof covers.

3

Wash bedding and stuffed toys weekly in a 60°C hot water.

4

Dust and vacuum regularly using double layer micro filtration dust bags.



5

Minimise the use of carpets, upholstered furniture and other household fabrics, such as curtains. Smooth floors and blinds can be cleaned easily.

6

Maintain a relative humidity of less than 45% with the help of a dehumidifier.

7

Maintain a room temperature of 21°C or less.



8

Pet's Relief® Allergone is an innovative allergen neutralising spray designed to reduce the exposure to house dust allergens. It provides long term protection of 5 months after a single application.

9

Regular grooming and bathing may remove house dust mites & droppings from fur and skin. Wipe the paws and use cleansing foams daily.

10

Change air filters for the furnace and air conditioning regularly or replace them for allergen-control filters.

Topical skin products help wash dust off the coat and paws and can strengthen the skin barrier, the bodies natural defence against allergen penetration:

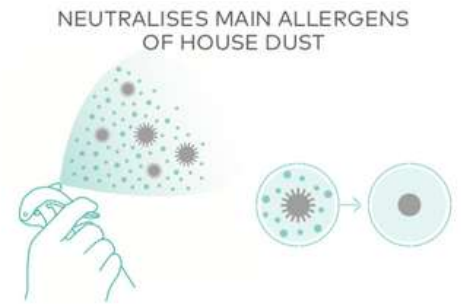


The Dermoscent Atop-7 skin range soothes red and itchy skin and helps restore skin barrier function. It comes in a variety of easy-to-use presentations to help owner compliance:

- **Atop-7 Wipes** - Soothing cleansing wipes to clean the fur and paws
- **Atop-7 Mousse** - Soothing cleansing foam to wash the coat daily
- **Atop-7 Shampoo** - Soothing shampoo with a quick 2-minute contact time for improved owner compliance. Helps ensure a deep cleanse of the skin and coat
- **Atop 7 Spray** - Hydrating anti-itch spray that creates a 'second skin', a protective film to help repel dust particles
- **Atop-7 Spot On** - Once-a week spot-on to help strengthen skin barrier function, ensuring the skin stays hydrated whilst reducing allergen penetration
- **Atop-7 Hydra Cream** - Intensely hydrates the skin and strengthens barrier function. Bitter to deter licking
- **Atop-7 Hydra Spray** - Contains pre & probiotic to regulate the skin microbiome and maintain a healthy skin barrier



Using an environmental spray the coats and binds dust particles can help reduce exposure to house dust and neutralise the allergic response when the skin comes into contact with house dust particles



ALLERGONE spray contains an aqueous suspension of microcapsules. The core of microcapsules is filled with a mixture of substances affecting the chemical structure of allergens particles.

ALLERGONE forms a polymer film that glues dust allergens in larger particles stopping them from floating in the air and allowing aggregated allergens to be removed easily with conventional cleaning.



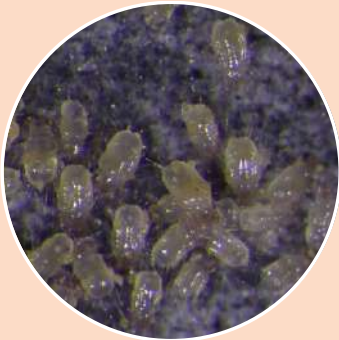
Storage mites

Moulds that grow in foods, as well as the food itself are consumed by storage mites. They are found in poorly stored plant and animal foods.

Most common species


Copra mite


Tyrophagus putrescentiae



- Indoor allergen
- Allergy symptoms all year round

The copra mite is found in cheese, bread, fruits, straw, decaying animals/vegetable matter, dried milk and ham.

 Ideal humidity 70-85%

 Ideal temperature 25-32°C


Hay mite

Lepidoglyphus destructor



- Indoor allergen
- Allergy symptoms all year round

Hay mites are found where plant or animal foods are processed and/or stored at a high humidity.

 Ideal humidity 70-90%

 Ideal temperature 23-27°C


Grain mite


Acarus siro



- Indoor allergen
- Allergy symptoms all year round

Main food sources are flour, other grain products, cheese, hay, and dried fruit.

 Ideal humidity 70-85%

 Ideal temperature 22-25°C

Tips to reduce exposure to storage mites

Storage mites are difficult to control, just like house dust mites. These environmental control tips can be helpful in limiting exposure.

1

Use airtight containers to keep food tightly closed and store in a cool, dark and dry environment.

2

Throw food packages away immediately, do not keep them in a bin indoors.

3

Reduce food stockpiles by buying smaller amounts. Maximum storage time should be less than one month.

4

Store pet food and treats in the freezer until needed.

5

Vacuum sites regularly where food is consumed and use double layer micro filtration dust bags.



7

Clean food bowls every day with detergent and hot water.

8

Maintain a relative humidity of less than 45% with the help of a dehumidifier.

6

Wipe your pet's face with a damp cloth after they finish eating to remove food remains.

9

Maintain a room temperature of 21°C or less.

10

Regular grooming and bathing may remove storage mite droppings from the fur and skin.

11

Change furnace filters regularly.

Moulds

Pets are sensitive to the spores. Moulds release spores to reproduce and can be easily distributed by the wind. Moulds are mainly found outdoors, but can also grow indoors when spores enter houses through windows.

Moulds give allergy symptoms throughout the year with a peak in spring and autumn. They can be found on damp surfaces such as walls, ceilings, floors, windows and window frames.

Most common species

Alternaria alternata

Alternaria alternata

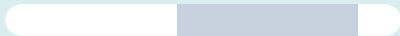


- Outdoor and indoor allergen
- Found worldwide

Alternaria occurs on soil, food, plants, textiles, on walls and window frames in damp environments.

Airborne:

J F M A M J J A S O N D



Aspergillus fumigatus

Aspergillus fumigatus

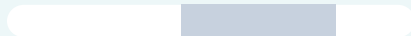


- Outdoor and indoor allergen
- Found worldwide

Aspergillus occurs in soil, stored foods and on wet surfaces (bathrooms, basements and refrigerators).

Airborne:

J F M A M J J A S O N D



Cladosporium herbarum

Cladosporium herbarum

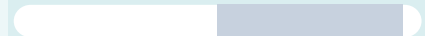


- Outdoor and indoor allergen
- Found worldwide

Cladosporium grows on soil, but also on leather, rubber, paper and wood.

Airborne:

J F M A M J J A S O N D



Tips to reduce exposure to moulds

Moulds are very common in the air, but they do not often cause allergic reactions in pets. If your pet is allergic to moulds, follow these tips to limit the exposure.

1

Remove moulds from damp environments and surfaces with a fungi cleaner.

2

Find the cause of damp spots and solve them.

3

Lower the humidity and increase ventilation indoors, especially in damp areas.

4

Check indoor plants for moulds: hydroponics and soil of plants that require a lot of water.



5

Avoid forest walks in autumn or in humid weather.

6

Dry clothes and bedding outdoors instead of indoors.



7

Maintain a room temperature of 21°C or less.



8

Change furnace, car and air conditioning filters regularly.

9

Regular grooming and bathing with shampoo and foams may remove spores from the fur and skin.

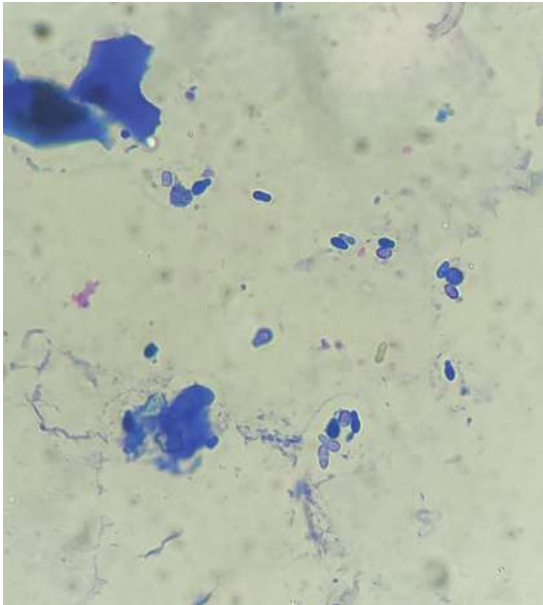
Malassezia

Malassezia is a yeast which is naturally found on the skin and in ear canals of healthy pets and humans.



Normally Malassezia causes no harm, but weakened skin allows yeast to multiply and cause non-seasonal symptoms in allergic pets.

Malassezia can be found examining skin scrapings under the microscope. They can be recognised by their shape of a peanut shell.



Tips on skin support and how to limit the reproduction of Malassezia

It is important to support the skin, as Malassezia multiplies when the skin is weakened. The tips below can help to limit the exposure.

- 1 Bathing with a 4% chlorhexidine anti fungal shampoo is recommended. Using a 4% chlorhexidine anti fungal foam or spray in between baths or in lieu of bathing if it is easier, is also advised. Wipe the paws with a chlorhexidine / Tris EDTA / Climbazole wipe daily.



Pollen Guide



Pollen seasonality
and mapping to help
determine allergen
relevance

Pollens

Pollens are reproductive cells of grasses, crops, plants and trees. These super small pollen granules can be distributed by the wind for many kilometers. Millions of pollens can float in the air, especially on warm and windy days.

Pets are most often exposed to pollens through inhalation and skin absorption. The allergy symptoms are mainly seasonal and can be different for each grass, weed or tree.

Grasses

Grasses are flowering plants that release pollens mainly from June until September. Grasses include cereal grasses, bamboos, grasses of natural grassland, cultivated lawns and pasture.

Most common species

Orchard grass

Dactylis glomerata



- Outdoor allergen
- Found worldwide

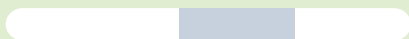
Orchard grass is a common grass which grows on roadsides, lawns, fields, banks, meadows and waste land.

It is mostly used for pasture and hay, but it is also planted for ground cover and soil stabilisation.

Orchard grass can grow 20-150 cm tall and the green-grey coloured leaves can reach a length of 35 cm. The spikelets can be 5-9 mm.

Flowers:

J F M A M J J A S O N D



Timothy grass

Phleum pratense



- Outdoor allergen
- Found worldwide

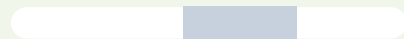
Timothy grass is one of the most common grasses and grows in fields, meadows and on roadsides. In cooler, humid climates.

Timothy grass is commonly found in hay and is sown in pastures for forage. It is the most extensively cultivated grass of meadow grasses.

This grass can grow 50-150 cm tall and the flower can be 75-150 mm long and 6-13 mm broad.

Flowers:

J F M A M J J A S O N D



Perennial ryegrass

Lolium perenne



- Outdoor allergen
- Found worldwide

Perennial Ryegrass is

common

on disturbed sites, pastures, meadows, fields, lawns, roadsides and even in clearings.

Perennial Ryegrass is used as a winter season pasture and forage grass, this is due to its high resistance.

The plant grows 30-60 cm tall and it produces unbranched stems with spikelets on alternating sides.

Flowers:

J F M A M J J A S O N D



Kentucky bluegrass

Poa pratensis



- Outdoor allergen
- Found worldwide

Kentucky bluegrass is found in prairies, fields, forests and mountain meadows.

It is common along roadsides, dunes and lawns.

Kentucky bluegrass is a highly palatable pasture grass and is also used for lawns and turf.

This grass grows 30-70 cm tall with 10 to 30 cm long leaves. It prefers cool, humid climates. It produces green or purple panicles.

Flowers:

J F M A M J J A S O N D



Bermuda grass

Cynodon dactylon



- Outdoor allergen
- Found worldwide

Bermuda grass is a common tropical grass and is found on waste sites, roadsides, pastures, agricultural fields, riparian areas and orchards.

Bermuda grass is used as a lawn and pasture grass, especially in dry areas.

This grass will grow about 20-50 cm high. It produces 2-5 narrow 2-6 cm flowering spikes at the top which are clustered together.

Flowers:

J F M A M J J A S O N D



Crops

A crop is a plant that can be grown and harvested extensively for profit or subsistence. Most crops are cultivated in agriculture. Crops flower from spring to summer, depending on the species.

Most common species

Cultivated oat

Avena sativa



- Outdoor allergen
- Cultivated worldwide

Oats may escape cultivated fields and can be found in dry wasteland and meadows, especially in heavier soils.

Oats are used to make oatmeal and cereals, but are also used to make beer and other alcoholic beverages.

This annual grass grows 120 cm tall and the seeds ripen in August. The two-flowered spikelets are up to 2.5 cm long.

Flowers:

J F M A M J J A S O N D



Cultivated rye

Secale cereale



- Outdoor allergen
- Cultivated worldwide

Rye can escape cultivated beds and be found along roadsides, wastelands and open rangeland.

Rye is used for flour, bread, beer and other alcoholic beverages such as whiskey, beer and vodka.

This grass grows 1-1.5 m tall. The bushy spike is a 7 to 15 cm flower head. The kernels are about 8 mm, oblong and light-brown.

Flowers:

J F M A M J J A S O N D



Weeds

Weeds are flowering plants that are often unwanted in farm fields, gardens, lawns, and parks. They release pollens mainly from June until October.

Most common species

Common mugwort

Artemisia vulgaris



- Outdoor allergen
- Found worldwide

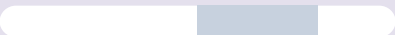
Mugwort is most common on rubbish heaps, roadsides, sites of demolished buildings and a variety of other disturbed environments.

Mugwort is difficult to control. It is used for pain relief, treatment of fever and used as a diuretic agent.

This weed grows about 1-2 m tall. The dark green leaves are pinnate and 5-20 cm long, with dense white hairs on the underside.

Flowers:

J F M A M J J A S O N D



Stinging nettle

Urtica dioica



- Outdoor allergen
- Found worldwide

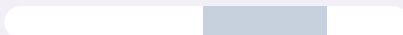
Nettle is found in open areas and meadows often near buildings. It has been used for salads, soups, tea, colouring and as a curdling agent.

Stinging nettle is a fast-growing weed and can reach a length of 1-2 m.

The leaves are covered with poison-filled hairs which discharge their poison when touched. This results in a burning sensation and a rash.

Flowers:

J F M A M J J A S O N D



English plantain

Plantago lanceolata



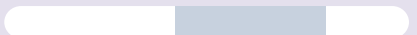
- Outdoor allergen
- Found worldwide

English plantain is found on grasslands, roadsides and cultivated ground. It often invades lawns and gardens.

This perennial weed can reach a maximum height of 50 cm. The 5-40 cm dark green leaves are oblong or lance-shaped. The spike stands on a grooved stem which is greenish-brown and flowers from the bottom to the top.

Flowers:

J F M A M J J A S O N D



Lamb's quarter
Chenopodium album



- Outdoor allergen
- Found worldwide

Lamb's quarter or common Pigweed is found in horticultural, wild landscapes, roadsides, but also in pastures and forages.

It is not only regarded as a weed in crop fields, but can also be cultivated and used for animal feed.

This 15-150 cm weed has oval-spearhead-shaped leaves with dense, coarse hair. The green-grey flowers are produced by 5-20 cm panicles.

Flowers:

J F M A M J J A S O N D



Dandelion
Taraxacum officinale



- Outdoor allergen
- Found worldwide

Dandelion is an abundant weed found in lawns, meadows, fields, roadsides and wastelands. It is sometimes cultivated.

This weed is used to make dandelion wine, salads, medicines and coffee substitutes.

It has deeply toothed leaves and grows 50 cm tall. It can flower again in autumn. In warmer climates it can flower all year.

Flowers:

J F M A M J J A S O N D



Sheep or red sorrel

Rumex acetosella



- Outdoor allergen
- Found worldwide

Sheep sorrel is commonly found on acidic, sandy soils in lawns, fields, pastures, meadows, wasteland and along roadsides.

The leaves have a lemony, spicy flavor and are used in salads, soups and as garnish.

This weed grows about 10-60 cm tall and produces small orange-yellow or red-orange flowers. The leaves often turn red in autumn.

Flowers:

J F M A M J J A S O N D



Common ragweed

Ambrosia elatior



- Outdoor allergen
- Found worldwide

Common ragweed is found in woodland and wasteland. It grows on dry fields and pastures, along roadsides and in disturbed soil.

The pollens are very small and easily distributed by the wind. In the afternoon the pollen release is at its highest.

Common ragweed can grow up to 70-90 cm. The soft leaves are pinnately divided and hairy. They can have a length of 3-13 cm.

Flowers:

J F M A M J J A S O N D



Trees

Trees are perennial plants with an elongated, wooden trunk that support branches and leaves. Depending on the species, flowering occurs at the end of the winter or spring.

Most common species

Birch

Betula pendula



- Outdoor allergen
- Found worldwide

Birch grows in woods, particularly where the soil is lighter. It often grows in heath lands and clearings and is also planted in gardens.

The bloom is usually short. Before they unfold their leaves, they shed enormous quantities of pollens.

They have a silvery, smooth bark. It can grow 20-25 m tall. The flowers (catkins) produce winged seeds and are widely distributed by the wind.

Flowers:

J F M A M J J A S O N D



Hazel

Corylus avellana



- Outdoor allergen
- Found worldwide

This shrub can be found at forest sides, but is also cultivated for its nuts. It grows both in the shade and in the sun.

Hazel can reach 2-7 m and is an aggressive spreader. It not only distributes by pollens, but also by nut-eating birds.

The flowers (catkins) are produced before the leaves. Hazelnuts grow in clusters on the Hazel tree. The leaves are 6-12 cm long.

Flowers:

J F M A M J J A S O N D



Elm

Ulmus americana



- Outdoor allergen
- Found worldwide

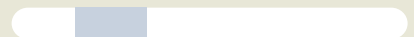
Elm grows in woods and hedges, meadows, fields, shores of rivers or lakes, swamps, growing on moist land.

This tree was often planted in urban settings as ornamental. It can grow up to 40 m tall.

Drooping, greenish-red flowers appear in late winter or early spring. The 1.5 cm long fruit is oval and flat and has papery wings.

Flowers:

J F M A M J J A S O N D



Willow

Salix viminalis



- Outdoor allergen
- Found worldwide

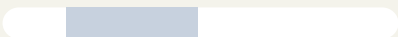
Willow grows in wet environments, such as riverbanks, lake shores and in drier sites where bare soil becomes available.

Willow is a deciduous shrub or small tree that can grow 8 m high. The flowers (catkins) appear in Spring.

The fruit is small and contains seeds. The seeds have long, silky, white hairs, which allow the seeds to be distributed by the wind.

Flowers:

J F M A M J J A S O N D



Sycamore

Platanus occidentalis



- Outdoor allergen
- Found worldwide

Sycamore is a deciduous tree which is native to lowland areas, typically reaching its largest size along streams, rivers and flood plains.

Sycamore was formerly extensively planted as a shade tree and can grow up to 30 to 40 m high.

Yellow-red, small flowers give way to fruit balls which gradually disintegrate during Autumn. Seeds disperse with the wind.

Flowers:

J F M A M J J A S O N D



Black alder

Alnus glutinosa



- Outdoor allergen
- Found worldwide

Black alder thrives in moist soils near rivers, ponds and lakes. Sometimes it grows in mixed woodland and on forest edges.

This deciduous tree grows under favourable circumstances to a height of 20 to 30 m.

The buds are purplish-brown and have short stalks. Catkins form in autumn and remain dormant during the winter. The catkins flower in March.

Flowers:

J F M A M J J A S O N D



Olive

Olea europea



- Outdoor allergen
- Found worldwide

Olives grow in plantations, woods, and as shrub in dry, rocky places. It is grown on 5 continents and it is famous for its fruits and oil.

The olive is very commonly cultivated in Mediterranean climates. It develops small, white, feathery flowers.

Olive trees are small and can grow up to 8–15 m. The silvery green leaves are 4-10 cm and oblong. Olives are harvested in the green to purple stage.

Flowers:

J F M A M J J A S O N D



Tips to reduce exposure to pollens

Because pollens are airborne, it is not possible to completely avoid them. The following tips can help to limit the exposure.

1

Know which pollens are responsible for the patients symptoms, so they can be avoided as much as possible. If they are unknown, your vet can perform a blood or skin test to find out which allergens your pet is allergic to.

2

Keep windows closed as much as possible on windy and dry days. For fresh air, it is best to open windows when there is a low pollen count: after a rainfall, in the morning or in the evening.

3

Keep animals indoors when local areas are being mowed.

4

Keep an eye on the pollen forecast.

5

Dust and vacuum regularly using double layer micro filtration dust bags.

6

Change car and air conditioning filters regularly or replace them for allergen-control filters.



7

Dry clothes and bedding indoors instead of outdoors.

8

Regular grooming and bathing may remove pollens from fur and skin. Foams can be used daily in preference to wet bathing.



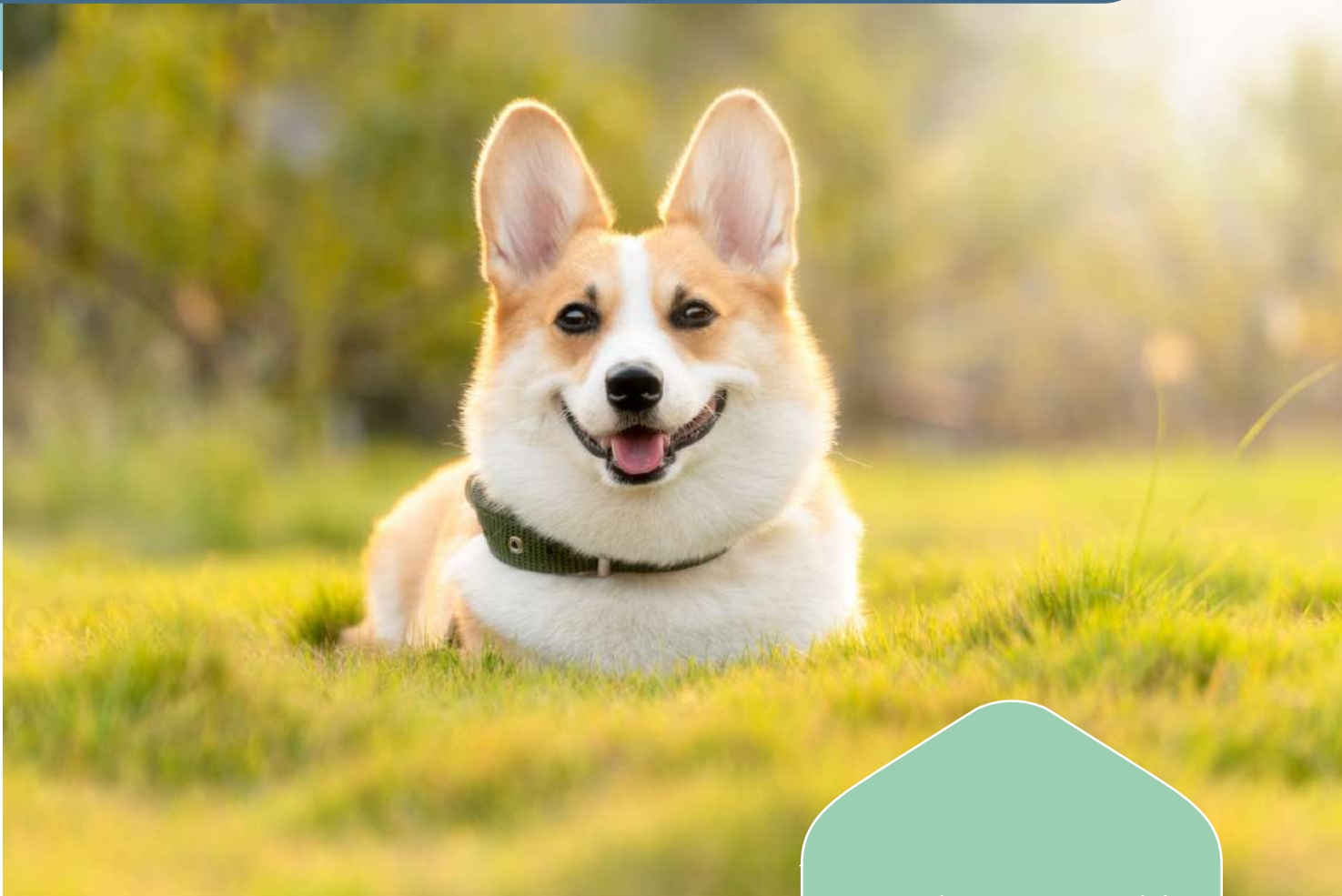
Dermoscent Atop-7 Mousse can be applied daily to wash allergens from the coat. It also strengthens skin barrier function and soothes itchy skin

Treating Allergy



Allergen Specific
Immunotherapy &
topical therapy

Immunotherapy



Treating atopy with
an allergy vaccine

Allergen Specific Immunotherapy

The best and simplest treatment is to avoid contact with the allergens. Unfortunately, most of the time this is not possible.

There are a number of short-term medications available to help control the allergy symptoms. These symptomatic medications, such as corticosteroids, cyclosporine, oclacitinib and lokivetmab are excellent at suppressing the allergic reaction, however they do not treat the root cause of the disease.

These medications can have significant disadvantages, especially when they have to be given as long-term therapy over an animal's lifetime. For that reason, it is advisable to administer these medications for short periods.

After determining the cause of the allergy through an allergy test, it is possible to produce an allergen-specific immunotherapy (hyposensitisation) specifically for each patient.

Allergen-specific immunotherapy is the only disease modifying therapy, which can make the immune system less sensitive, or not sensitive at all, to the allergens that trigger the allergic reaction.

Highest category of evidence and strength of recommendation

The international Task Force on Canine Atopic Dermatitis has concluded that allergen-specific immunotherapy has the highest category of evidence (COE 1a) and the highest strength of recommendation (SOR A) for the treatment of atopic dermatitis⁶.

Allergen-specific immunotherapy can be injected subcutaneously with a monthly injection



Immunotherapy

Immunotherapy has proven efficacy and safety. It has very few rare side effects and can therefore be given for long periods.

Immunotherapy works by giving repeated doses of allergens, thereby stimulating an immune response in the body which leads to the build-up of immunological tolerance. It is the only treatment which alters the course of allergic disease while at the same time controlling the symptoms.

• Treats the root cause, not only the symptoms

• Effective

• Safe

• Identical allergens for allergy tests and therapies

• 10 months treatment with only one vial

• Easy to use

The efficacy rate of subcutaneous immunotherapy where symptoms are reduced by 50% or more is up to 75%



Administration and dosage

Schedule

The first dosage starts at 0.2ml, after which it is gradually increased over longer intervals to a maximum of 1.0ml. When this dosage is reached after 12 weeks, a fixed dose of 1.0ml is administered monthly.

Allergy is a chronic disease and every 10 months a follow-up vial is required.

One vial of Immunotherapy lasts for 10 months. Up to 8 allergens per each vial

Advised schedule	Dosage
Week 1	0.2 ml
2 weeks later (week 3)	0.4 ml
2 weeks later (week 5)	0.6 ml
2 weeks later (week 7)	0.8 ml
3 weeks later (week 10)	1.0 ml
3 weeks later (week 13)	1.0 ml
4 weeks later (week 17)	1.0 ml
4 weeks later (week 21)	1.0 ml

Maintenance period: 1.0 ml every 4 weeks.



Possible deviations

In some particular cases, it can be necessary to deviate from the standard dosing schedule, for example:

Are symptoms occurring or worse immediately after the vaccine injection and reducing after 1-2 days?

Sometimes the dosing schedule seems to be too quick for some animals. It is best to take a step back for 1 or 2 times in the dosing schedule (for example, giving 0.8 ml instead of 1.0 ml). If needed, symptomatic medication can be given concomitant to alleviate the symptoms and calm the skin.

Are the symptoms coming back 1-2 weeks before the new injection?

The interval can be too long for the animal. It is possible to adjust the interval to 0.8 ml every 3 weeks or 0.5 ml every 2 weeks. This then becomes the new maintenance dose. Adjusting the interval is only recommended if the dog was already on the maintenance dose (1.0 ml every 4 weeks).

Our allergy experts are always available to discuss particular cases in order to find the best schedule for your patient.



Other Management Options

A multimodal approach to allergy is very important. You can use in conjunction with immunotherapy other products that can help control the symptoms of allergy when necessary.

Topical skin and ear products can help manage the microflora on the skin and in the ears, and help prevent secondary infections. Sprays and spot-on's containing EFAs and moisturising ingredients can help support the skin barrier and help reduce redness and itch. Shampoos, foams and wipes can all be used to easily wash allergens off of the coat and reduce bacteria and yeast on the skin and paws.

Symptomatic medications that block the itch are very effective at quickly making animals comfortable, especially during build-up phase of immunotherapy and in case of flare ups.

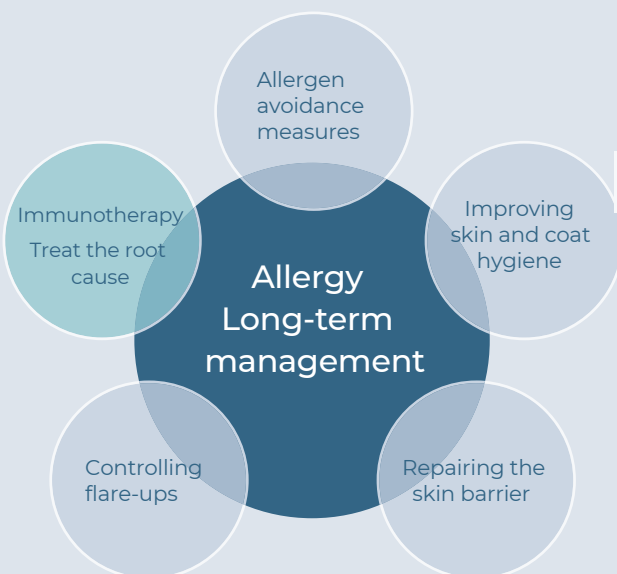
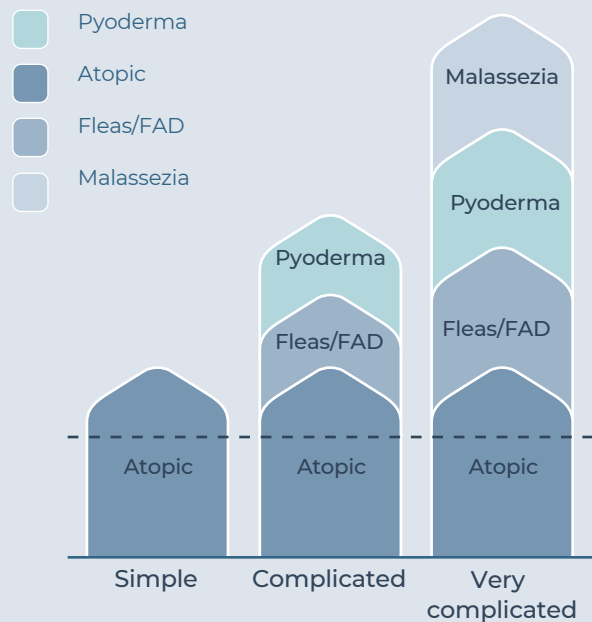
Combining all of these treatment options can be beneficial in reducing symptoms and keeping your pet below their itch threshold, helping them live a comfortable life.

Pruritic threshold and flare-ups

In case of a flare-up, the symptoms suddenly appear or worsen. This means that the animal has risen above the pruritic threshold. It can happen due to different causes:

- more contact with allergens
- secondary infection (yeast, bacterial, etc.)
- other skin irritation due to fleas, swimming, more or less washing, etc.

With a flare-up, it is important to find the cause and prevent it. If the cause is unknown, it can sometimes be sufficient to correct the symptoms with temporary symptomatic medication.



Topical Therapy



Managing allergy symptoms with topical skin & ear products

Topical Therapy

Using topical skin and ear products is an excellent way to help reduce the symptoms associated with allergy, including itching and secondary skin and ear infections. Shampoos, wipes, foams, sprays, spot-ons and ear cleaners can be used alongside other medications and are an ideal way to manage and prevent symptoms of allergy long-term.



A multimodal approach

A multimodal approach to allergy is very important. Using topical skin and ear products in conjunction with immunotherapy, can help control the symptoms of allergy when necessary and maintain healthy skin and ears long-term.

Wash the coat regularly



Environmental allergens like pollen and dust can easily come into contact with your pet's coat and skin. It is recommended to wash the coat and skin regularly to help remove these allergens. Regular bathing with a moisturising, anti-itch shampoo like Dermoscent Atop-7 Shampoo can help deeply cleanse the coat and skin.

For daily cleansing of the coat and skin, using an easy-to-use cleansing foam like Dermoscent Atop-7 Mousse can quickly help wash allergens off the coat whilst rehydrating the skin and repairing the skin barrier.

Wipe the paws

Many allergic patients suffer with itchy paws caused by allergens like pollen and dust. As a result of excess chewing and licking caused by the itching associated with allergy, many of these pets get bacterial +/- fungal problems on their feet.

To help reduce licking and chewing caused by environmental allergens, it is recommended to wipe the paws daily. Using a medicated wipe like CLX Wipes can also help manage the microflora on the skin and help prevent issues caused by excess licking.



A multimodal approach

Repair the skin barrier



Allergic dogs are known to have defects in their skin barrier, the body's natural defence against environmental allergens. When the skin barrier is not properly intact, allergens can penetrate the skin more easily and trigger an allergic reaction. It is important to help try and repair and strengthen the skin barrier in allergic patients.

Dermoscent Atop-7 Spray, Atop-7 Hydra Spray and Atop-7 Hydra Cream contain natural essential oils that help restore and repair the skin barrier. They also help moisturise the skin and reduce redness and itch.

Atop-7 Spot-On is an easy-to-use, once-a-week spot on therapy that can help strengthen the skin barrier.

Clean the ears regularly

Many allergic patients get recurrent ear problems. Inflammation associated with allergy can result in a change in the microclimate of the ear, meaning bacteria and yeast can more easily proliferate.

To help reduce the frequency of ear problems, it is recommended to clean the ears of patients who regularly get ear flare ups.

Using an antibacterial cleaner like Otodine can help manage ears of patients who have an imbalance of bacteria. Patients who are more prone to yeast overgrowth can be managed with an anti fungal cleaner like Clorexyderm Oto. For patients where the ear is prone to an excess production of ear wax, a cleaner like Otoact is recommended.



Maintain good skin hygiene

Many allergic patients get recurrent skin problems caused by an imbalance of the skin microflora. To help maintain healthy skin, it is recommended to cleanse the skin regularly using topical antibacterial and anti fungal products.

The Clorexyderm 4% skin range is antibacterial and anti fungal and can help soothe irritated skin. It is available as a shampoo with a short 5-minute contact time for improved owner compliance.

Clorexyderm 4% Foam and Spray are easy-to-use topical solutions that are ideal for localised areas of the skin when wet bathing may not be needed, or they can be used on their own when shampooing is difficult.

Dermoscent PYO-Spot is an easy-to-use, once-a-week spot on therapy that helps regulate the skin microflora and can extend the period of time between skin flare-ups.



A multimodal approach

Control environmental exposure



Avoid contact with allergens is the most effective way to treat the symptoms. Although most of the allergens are impossible to avoid, there are some preventive options that can help.

Pet's Relief® ALLERGONE is an innovative allergen neutralizing spray designed to reduce the exposure to house dust allergens. It provides a long term protection of 5 months after a single application.

Skin health supplements

It is believed atopy is associated with a defect skin barrier. This makes it easier for allergens to penetrate the skin and cause symptoms.

Dietary skin supplements can support and improve the skin barrier⁸.

Pet's Relief® ATOPI-3 is a complete and well-balanced dietary supplement that includes omega 3 (EPA and DHA), Zinc, MSM (methylsulfonylmethane), Vitamine A, Vitamine C and Vitamine E. It is specially developed to maintain the natural skin barrier, to promote skin repair, to help control excessive skin inflammation and to support neutralization of free-radicals (antioxidant).



Skin & gut microbiome regulators



Allergic patients have a dysbiosis of the skin microbiome, meaning they have a higher proportion of unhealthy microflora on the skin. This makes them more prone to skin flare-ups. There is also evidence that the gut microbiome plays a part in the overall health of the skin.

Linkskin Spray is specially formulated to help regulate the skin microbiome and promote the growth of beneficial skin flora. It also helps soothe itchy skin and reduce redness.

Linkskin Tablets contain pre and probiotic to help promote a healthy gut microbiome for beneficial effects on the skin.



Understanding
Food Allergy in
Pets

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Food Allergies

Diagnosis and management

What if my pet is allergic to food?

The most common allergens responsible for food allergy in dogs include beef, chicken, fish, dairy and soy proteins. Frequently the food has been part of their diet for a long time.

The symptoms can appear at any age, but in many cases first signs are seen when they are 1 year old. Food allergy symptoms are mainly present throughout the year (non-seasonal).

Besides the typical symptoms of allergy, between 10% and 15% of dogs with food allergy also seem to have gastrointestinal complaints, such as vomiting, diarrhea, weight loss and abdominal discomfort.



How can it be diagnosed?

The only way to diagnose food allergy is through a food elimination trial.

This trial consists by introducing a new diet (known as elimination diet) and should be followed for at least 6-8 weeks. If there is an improvement noticeable after this time, the previous (old) diet should be reintroduced for a maximum of 3 weeks to see if the symptoms reoccur.

If they do reoccur, then return to the new diet. If your pet improves again, the diagnosis of food allergy is confirmed.



It is very important that your dog does not consume any treats, snacks or flavoured medication during the food elimination trial

Clinical Signs

Dogs suffering from AFR generally present with dermatological or gastrointestinal signs, or combination of both.

Dermatological signs are varied, and often indistinguishable from those associated with atopic dermatitis, although the presence of an unusual distribution or concomitant gastrointestinal signs may raise suspicion for an adverse food reaction.

When pruritus is not corticosteroid-responsive, a food allergy should be considered (if pruritus responds to corticosteroids that does not rule out the possibility that a food allergy is present).

Generalized or localized non-seasonal pruritus (face, ears, paws, axillae, inguinal and perineal regions) is the most frequently described dermatological sign. It is also possible for the effects of a food allergy to be below the 'itch threshold' and only observe flares of



- Non-seasonal pruritus
- Signs of allergic dermatitis
- Gastrointestinal signs
- Corticosteroid non-responsive

pruritus with the addition of environmental allergens during high pollen season. Otitis externa and recurrent pyoderma with or without pruritus has also been associated with AFR in dogs.

Gastrointestinal signs may include vomiting, diarrhea, weight loss, and abdominal discomfort.

Ears

Appearance:
Waxy discharge; redness; odor
Behaviour:
Scratching or rubbing ears with paws or against furniture

Face

Appearance:
Inflammation; redness; conjunctivitis; swelling
Behaviour:
Scratching or rubbing face with paws or against furniture

Skin

Appearance:
Reddened; possibly with crusts or scales; odor with secondary infections
Behaviour:
Scratching and licking sides/belly, elbows, groin

- + Otitis externa
- Recurrent pyoderma
- Vomiting
- Diarrhea
- Weight loss
- Abdominal discomfort
- Flatulence

Feet

Appearance:
Inflammation, redness, odor, brown discoloration where licking has occurred
Behaviour:
Licking and chewing of feet/pads

Hair & Coat

Appearance:
Bald spots; brown discoloration where licking has occurred
Behaviour:
Scratching sides/belly, rubbing face against furniture or carpet, licking



Diagnosis

Currently, the definitive diagnosis of food allergy in dogs is only possible through a food elimination trial followed by a food challenge test. The recommended length of this trial is at least 6-8 weeks.

Complete or partial improvement of pruritus during the trial is the main criterion for suspected food allergy. The diagnosis is confirmed by the recurrence of clinical signs when the food given previously is reintroduced. As animals may be multi sensitive, it may be necessary to attempt dietary restriction more than once.

The elimination trial can be done with a homemade diet, a commercial diet with hydrolyzed protein, or a commercial diet with proteins unusual for the dog.

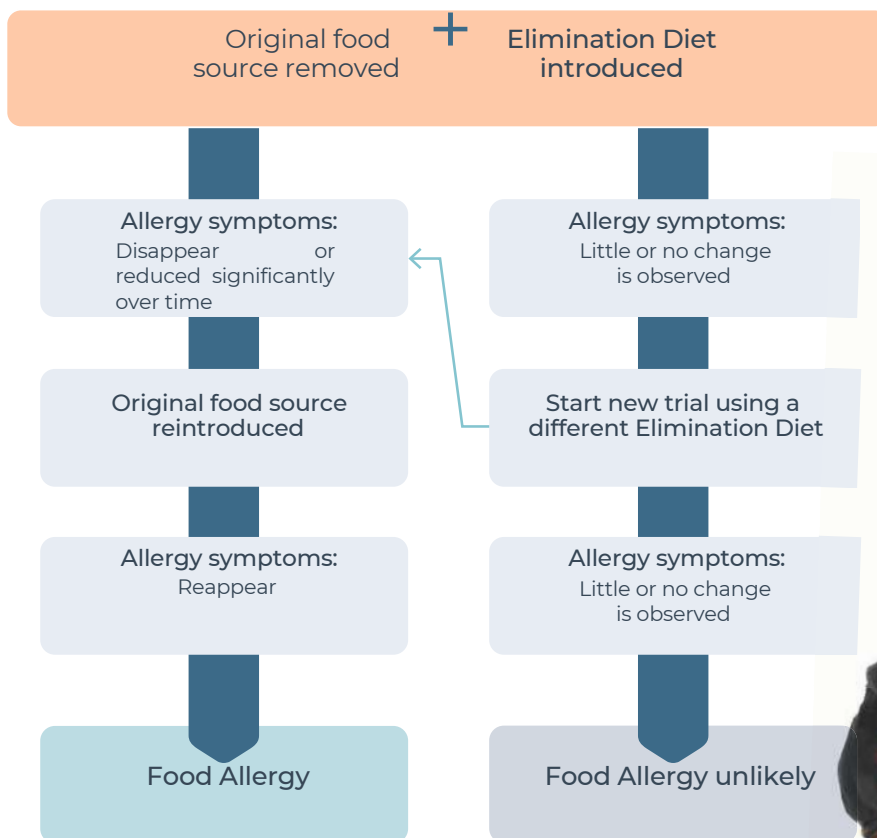
Commercial diets often contain larger protein molecules capable of inducing clinical deterioration in some dogs^{6,7} or protein sources not declared on the label^{8,9}.

There are conflicting studies on the effectiveness of hydrolyzed diets for allergic patients, with 10% to 40% of patients allergic to the basic protein continuing to show clinical signs on a hydrolyzed version⁷.

Home cooked diet is thus regarded as the most reliable diagnostic option, however less practical.

During the elimination diet, the dog must not receive any other food, treats, medications, vitamins, or supplements with any protein other than the one chosen for the diet.

Food elimination Trial - Food Challenge

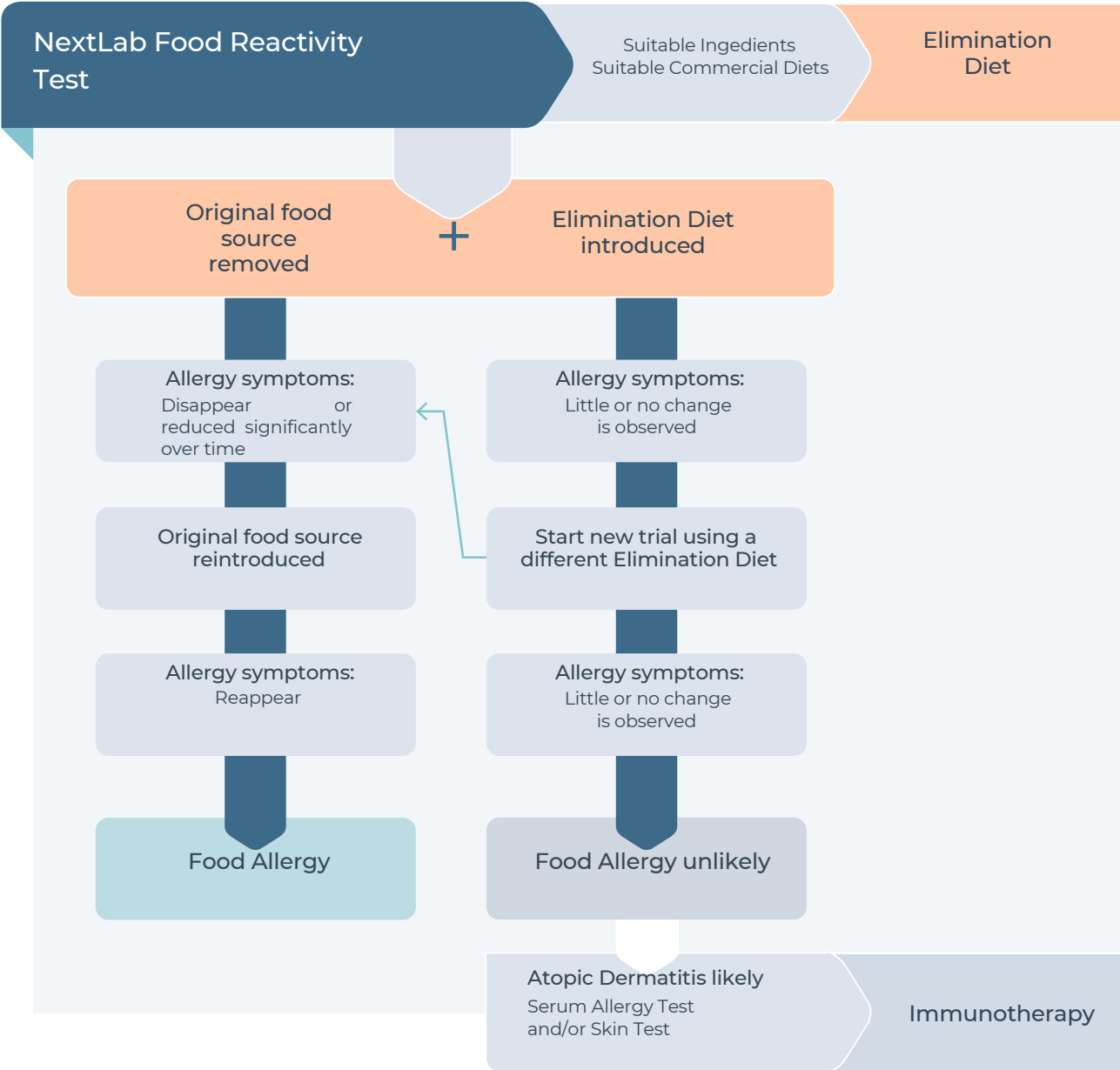


Management

Once food allergy is established, strict avoidance of allergen is the gold standard. Taxonomic relationship between protein sources should be considered to avoid the risk of cross-reactivity.

If the trial appears to have been performed correctly, but the patient did not improve or slightly improved, then it is likely suffering from atopic dermatitis and reacting to environmental allergens. NextLab Serum Test and/or an Intradermal Skin Test can identify these

environmental allergens that your patient is reacting to and help you putting together an appropriate immunotherapy to treat the cause of the allergy.



Which new diet can I give?

A food elimination trial can be done with a home-cooked diet, a commercial diet with hydrolysed proteins or a commercial diet that contains proteins your pet has not previously tried. It is not easy to determine a right option when it comes to selecting which elimination diet to use.

Commercial diets, even if with new proteins for your pet, can sometimes contain protein sources not declared on the label. In two studies, undeclared proteins were found in 83% and 90% of the tested foods.

In commercial diets containing hydrolysed proteins, these proteins have been broken down into smaller pieces in order to prevent a reaction. There are conflicting studies on the effectiveness of hydrolysed diets, with 10% to 40% of patients who are allergic to the basic protein continuing to show symptoms on a hydrolysed version.

Vegetable-based diets such as Solo Vegetal are another option for elimination trials and are beneficial because they do not contain any meat, fish, dairy or soy which are often considered the allergens most likely to trigger symptoms.

Home cooked diets are the most reliable option, however more time consuming and less practical.



Conducting an
elimination diet
trial

—



Diet Trials



DIET TRIAL INSTRUCTIONS FOR DOGS

The only way to diagnose a food allergy is by conducting a diet trial (also known as food trial or elimination diet) and this in itself should be seen as a diagnostic test. The results of your dog's serum food test will guide the selection of the appropriate ingredients to be used in the diet trial.

FOOD TEST RESULTS

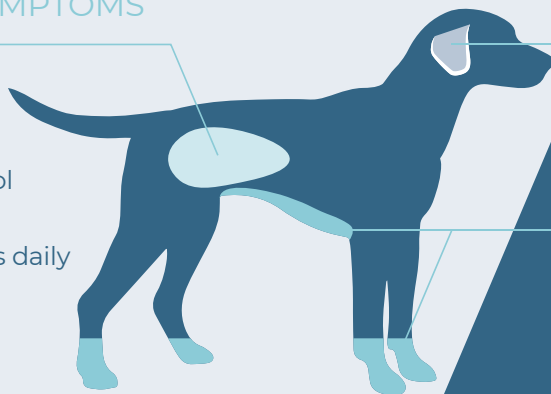
PROTEINS Mammalian	Candidate for Dietary Trial	Class Score	
		IgE	IgG
Beef		4	4
Cow's milk	✓	2	3
Lamb		0	0
Pork		3	1
Rabbit		4	1
Venison		1	1
Avian	✓	0	0
Chicken		0	0
Duck	✓	0	0
Turkey		0	0
Whole egg		0	0

WHAT IS A FOOD ALLERGY?

A food allergy involves an immune reaction to one or more specific ingredients in the diet. The food in question is incorrectly viewed by the animal's immune system as a threat, resulting in the production of antibodies (part of the body's natural defence) against it. This can cause digestive symptoms, ear symptoms or skin symptoms, which may occur on their own or in combination, as shown below.

DIGESTIVE SYMPTOMS

- Diarrhoea
- Loose stools
- Excess gas
- Jelly on / with stool
- Vomiting
- More than 3 stools daily



EAR SYMPTOMS

- Appearance: Smelly, irritated and inflamed, scabs
- Behaviour: Scratching, rubbing

SKIN SYMPTOMS

- Appearance: Smelly, irritated and inflamed, areas of hair loss, dandruff / scabs, greasy, skin colour change
- Behaviour: Scratching, rubbing, persistent licking, chewing or nibbling

WHY HAS MY DOG BEEN PUT ON A DIET TRIAL?

It is impossible to tell just from their symptoms whether an itchy dog has a food allergy, an allergy to something in their environment, or both, because the symptoms can look exactly the same. Likewise, there are many other possible reasons for dogs to have digestive symptoms.

As part of the process to reach a diagnosis for the symptoms your dog is displaying, it is important to either rule-in or rule-out a food allergy. For dogs with skin symptoms this is normally done after infections (bacterial, yeast and fungal) and ectoparasites (fleas, mites and lice) have already been ruled-out and / or treated for. Those with digestive signs may have already had blood tests and / or a sample of their stool sent for analysis to rule out other causes.

WHY CAN'T I JUST USE MEDICATION?

For some dogs with food allergies, removing the problem foods from their diet will mean that their symptoms will completely resolve, preventing the need for life-long medication. Other dogs with skin and ear signs will have both a food allergy and other allergies in addition (usually to things in their environment), so you may only see a partial improvement when the problem foods are removed. This is still very beneficial though, because allergy is a life-long condition and the dietary changes may reduce the amount of medication they need. Food allergies are common, especially in dogs with skin or ear problems, so while it's important to recognise many dogs will not improve during the diet trial, the potential benefit for those that do makes it an essential part of the diagnostic work-up and well worth doing.



WHAT DOES A DIET TRIAL ENTAIL?

Conducting a diet trial means that for up to 8 weeks you will feed your dog a very strict diet consisting of only water, and:

- **The agreed food(s)** – this will either be a home-prepared or a commercial diet.
- **Necessary medications** – this may include treatment for the skin, ear or digestive symptoms. Follow your vet’s advice on appropriate use during the diet trial. If any medications contain flavourings, alternative options may be recommended.

If your dog’s symptoms improve, the original diet is given again to see if they return; only then do we know it was the diet that caused the improvement rather than something else (just a coincidence). Ideally, further investigation will then occur to identify which individual ingredient(s) in the diet are causing the reaction, so they can be permanently removed. In a small number of dogs, where there is no response to the initial diet trial, your vet may recommend a second diet trial using a completely different food.

HOW DO WE SELECT AN APPROPRIATE FOOD?

STEP 1: With your vet’s support, identify ingredients that your dog has never eaten before; you can help find these by:

- 1 Using serum food test results – only consider negative scoring foods, where possible.
- 2 Completing a full dietary history – list all foods (commercial or otherwise) known to have been eaten by your dog.
- 3 Avoiding similar foods to those previously eaten - e.g., if beef has been fed, also avoid lamb, cow’s milk and venison, as they could also trigger a reaction (your vet can help provide further guidance based on your dog’s history).

STEP 2: Using the information gathered in step 1, choose the right type of diet to suit you and your dog from the choices below.

DIFFERENT TYPES OF DIET

HOME-PREPARED DIET	COMMERCIAL DIETS	
	HYDROLYSED	SINGLE PROTEIN
<p>This involves selecting one protein source and one carbohydrate. You will need to either regularly prepare this diet freshly for your dog or batch cook and freeze.</p> <p>BENEFITS: Very palatable, can be tailored to your dog’s preferences, very limited number of ingredients and complete control of these, unusual ingredients can be used.</p> <p>DRAWBACKS: Substantial time commitment, can be expensive (depending on size of dog / ingredients), needs nutritionally balancing if feeding long-term or for growing dogs (the 8-week trial period is fine for most dogs but your vet will advise), a reaction to the food is still possible.</p>	<p>In a hydrolysed diet, the proteins have been broken down to a small enough size that they are unlikely to stimulate the dog’s immune system.</p> <p>BENEFITS: Originally designed for diet trials, but are also suitable for long term use, minimal chance of causing a reaction, useful if dietary history unknown / eaten wide variety of foods, most are suitable for growing dogs.</p> <p>DRAWBACKS: Expensive, variable palatability, a reaction to the food is still possible.</p>	<p>These diets contain limited and / or unusual protein sources.</p> <p>BENEFITS: Palatable, can be less costly than hydrolysed diets, usually suitable for long-term feeding of adult dogs, some contain other ingredients that can benefit the skin / gut.</p> <p>DRAWBACKS: Often contain many ingredients overall, so increase the chance of causing a reaction. As a result, these diets are often used for long-term management rather than for the food trial. May be unsuitable for growing dogs.</p>

Please note, the term **hypoallergenic** is used for many different sorts of commercial diets; some of these may be hydrolysed or a single / novel protein but many are unsuitable for a diet trial. Your vet will be able to provide guidance.

IMPORTANT: A successful diet trial requires your full commitment. Be upfront and realistic when discussing options with your vet, both at the beginning and throughout, so that it can be adapted or modified to suit you and your dog.

STARTING THE DIET TRIAL

To minimise the chance of a digestive upset, gradually introduce the new diet over a period of 5 - 7 days. Slowly give more of the new diet and less of the old until it is completely replaced. If your dog has any digestive upset (vomiting / diarrhoea), refuses to eat the new diet, seems to be losing weight, does not have a bowel movement for more than 24 hours, or you are concerned for any other reason about the diet, please contact your vet.

Like any diagnostic test, a diet trial must be run properly in order to generate meaningful results, so it is very important to follow your vet's instructions completely. Below are some tips on making your dog's diet trial a success.



TIPS FOR A SUCCESSFUL DIET TRIAL

TREATS

- For treats during the diet trial there are a few ideas below; or you can use small amounts of the new agreed food as it is.
- If using a commercial diet, kibble can be soaked in water and baked to make your own treats.
- If using a home-prepared diet, use small amounts of the fresh, pre-agreed ingredients to make treats.
- Some commercial treats may be suitable if they contain just a single ingredient (e.g., 100% duck); check with your vet before you buy to make sure.

HIDDEN INGREDIENTS

- Avoid flavoured items such as supplements, toothpastes, toys and chews. Ask your vet for alternatives.
- Avoid using food to give medication during the diet trial, unless it has been agreed with your vet.
- Always check the additional ingredients listed on the packaging of any food used (commercial or home-prepared) to ensure they do not contain traces of the ingredients you are trying to avoid.

ACCIDENTAL EXPOSURE

- If possible, feed any other pets in the household the same diet. If not, feed them separately and remove their feeding bowls immediately afterwards.
- Avoid cross-contamination by thoroughly washing bowls, chopping boards, pans, utensils and your hands before preparing food. Use ceramic, stainless steel, or glass bowls, especially if skin symptoms are mainly around the face.
- Don't let your pet scavenge on walks or at family meal times and ensure they do not have access to bins or food cupboards. Consider using a basket muzzle if they are prone to scavenging. Ask your vet how to introduce your dog to a muzzle so that it is a positive experience.

GET EVERYONE INVOLVED

- Ensure everyone in the house, or involved in looking after your dog, fully understands the importance of following the rules, in order to make the results count.
- Use the diary on page 4 to record everything consumed by your dog during the trial, as well as any symptoms or changes in condition, to help you and your vet monitor their progress.





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