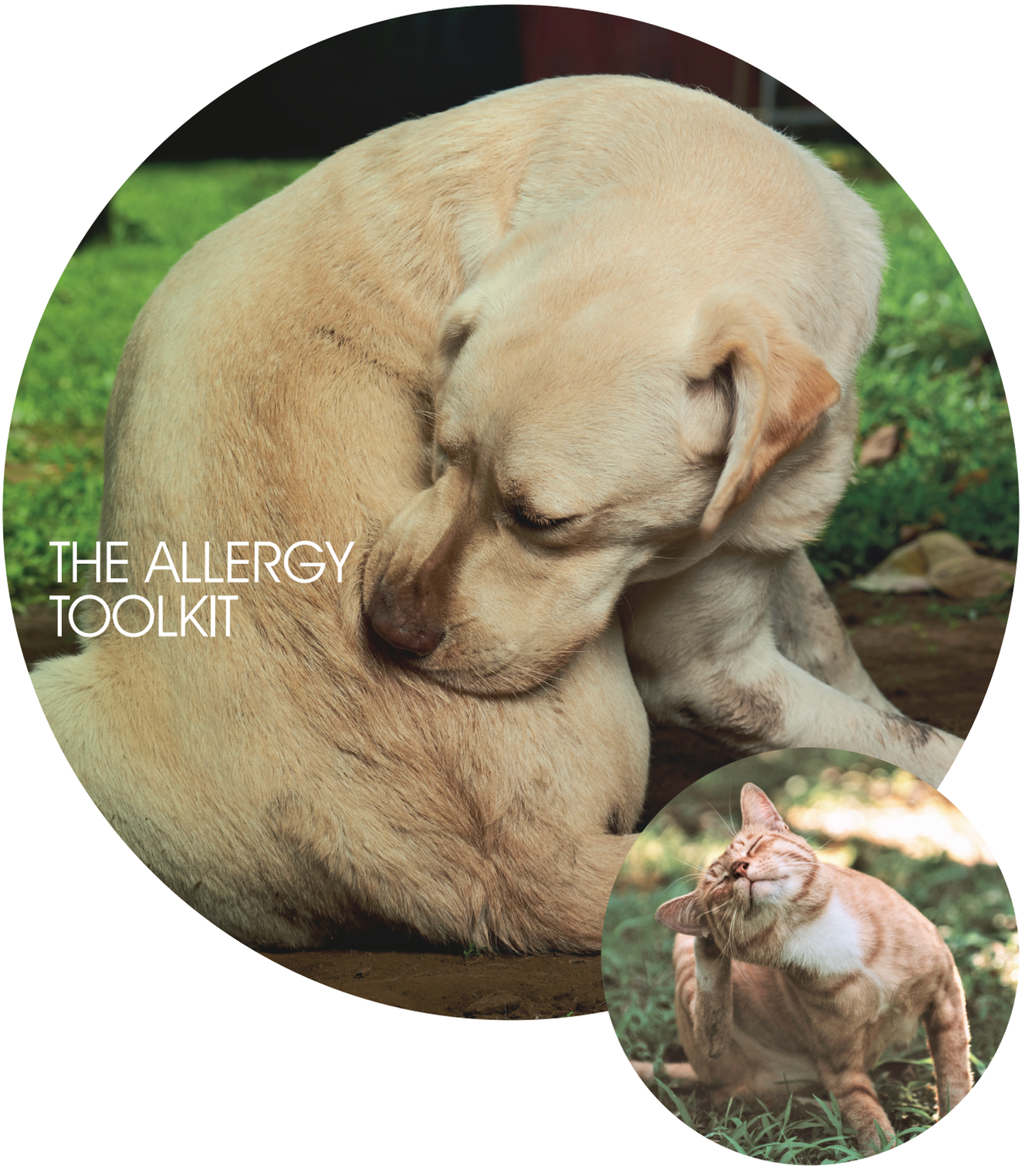
SENSITEST®

THE COMPLETE™
ALLERGY SERVICE



THE ALLERGY TOOLKIT

INNOVATION IN
ANIMAL HEALTHCARE

Avacta®
ANIMAL HEALTH

WHO ARE AVACTA ANIMAL HEALTH?

Established in 1999, Avacta Animal Health provides veterinary laboratory services and diagnostic testing to veterinary surgeons, laboratories and commercial and research organisations worldwide. Our allergy testing services, under the **SENSI**TEST® brand, provide a range of options to meet the needs of veterinary professionals and the variety of cases they encounter. We also offer a range of Acute Phase Protein (APP) and other selected assays.

ABOUT ALLERGY

ALLERGIC SKIN DISEASE

Allergic skin disease includes flea allergic dermatitis, atopic dermatitis, cutaneous adverse food reactions and contact allergies. It is believed to affect around 10-30% of dogs[1] and was found to be the third most common disorder reported in a recent study investigating the prevalence of canine health conditions[2]. In cats, the incidence of atopic dermatitis has been reported as 10-20%[1,3].

Breeds found to be at increased risk include:

Dogs – Basset Hound, Beagle, Bichon Frise, Bull Mastiff, Bulldog, Bull Terrier, Boxer, Cairn Terrier, Chow Chow, Dalmatian, Fox Terrier, French Bulldog, German Shepherd Dog, Golden Retriever, Great Dane, Hungarian Vizsla, Jack Russell Terrier, Labrador Retriever, Lhasa Apso, Newfoundland, Pug, Rhodesian Ridgeback, Schnauzer, Shar-Pei, Springer Spaniel, Staffordshire Terrier, Tibetan Terrier and West Highland White Terrier[4,5]

Cats – Abyssinian, Devon Rex and Domestic (all hair lengths)[3]

ADVERSE FOOD REACTIONS (AFRs)

Food allergies can manifest as skin conditions, gastrointestinal issues or both. When more broadly defined as adverse food reactions, this term incorporates other causes of gastrointestinal upset in addition to allergies including food intolerances (see page 6 for further information). Although the true prevalence of food allergies in dogs and cats is not currently known, it is estimated that around 33% of dogs and 13% of cats with atopic dermatitis will have concurrent adverse food reactions[3,6].

Breeds found to be at increased risk include:

Dog – Boxer, German Shepherd Dog, Pug, Rhodesian Ridgeback and West Highland White Terrier[7]

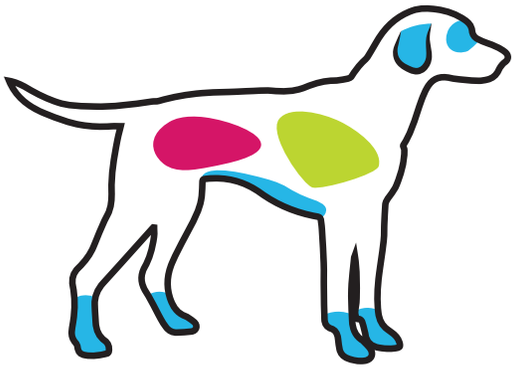
Cat – Birman and Siamese[8]

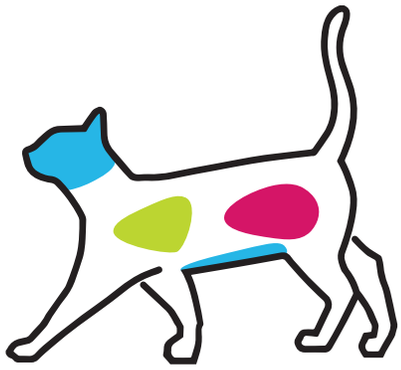
ALLERGIC RESPIRATORY DISEASE

Allergic respiratory disease is predominantly a feline issue. It is estimated that 1-5% of the total cat population are asthmatic, which is believed to be triggered by aeroallergens[9,10].

Breeds found to be at increased risk include: Balinese, Korat, Oriental, Seychellois and Siamese[11].

CLINICAL SIGNS





DERMATOLOGICAL
Compatible with atopic dermatitis or cutaneous adverse food reaction.

Dogs – Pruritus, erythema, otitis (may occur in isolation), recurrent bacterial or yeast infection.

Cats – Pruritus, miliary dermatitis, alopecia/over-grooming, eosinophilic granuloma complex.

GASTROINTESTINAL
Increased frequency of defecation, softer stools, diarrhoea, vomiting, weight loss.

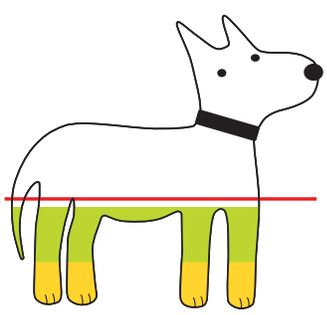
RESPIRATORY
Wheezing, coughing (may be mistaken in the cat for hairballs) increased respiratory effort and rate.

THE ALLERGY THRESHOLD

Allergic animals will often have several trigger factors such as: multiple allergies, secondary fungal, bacterial and yeast infections, ectoparasite infestations and genetic defects to the skin barrier. As it is frequently the accumulative effect of these triggers that tips them over the allergic threshold, identifying and controlling them all is important.

● Environmental allergens ● Food allergens ● Allergic Threshold

A



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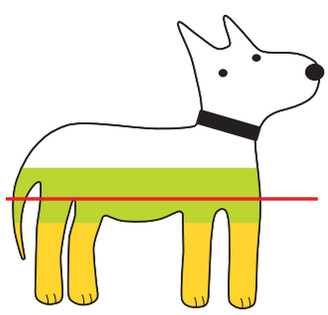

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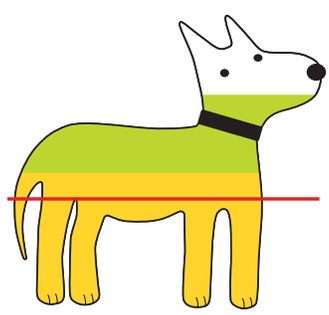

A

The combined allergic stimulation from the environmental and food allergens is below the threshold, so no clinical signs are seen. If compounding trigger factors such as a secondary infection or a high pollen count were added however, the threshold could easily be reached causing clinical signs.

B

The combined allergenic stimulation is above the threshold, so clinical signs are seen. Clinical signs could be managed by controlling either the environmental or food allergens, but by only considering one aspect there will be vulnerability to other compounding triggers.

C

The allergenic stimulation is above the threshold, so clinical signs are seen. Control of either the food or environmental allergens in isolation is not sufficient to go below the threshold, only by identifying and controlling both will resolution of the clinical signs occur.

IN REALITY, OF COURSE, THERE MAY BE MANY INDIVIDUAL ENVIRONMENTAL OR FOOD ALLERGENS EACH CONTRIBUTING

Our bestselling canine **COMPLETE ALLERGY PLUS** and feline **COMPLETE ALLERGY** packages provide a simple and cost-effective way of selecting all species relevant serological testing components.

DIAGNOSTIC WORK-UP OVERVIEW

SKIN ALLERGIES

STEP 1 – RULE OUT ECTOPARASITES AND BACTERIAL, YEAST AND FUNGAL INFECTIONS
Tests we offer: skin scrapes, cytology*, culture and sensitivity*, Staphylococcus IgE/IgG*⁺, Malassezia IgE/IgG*⁺, Sarcoptes IgG⁺ and fungal PCR or culture.

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STEP 2 – SENSITEST® COMPREHENSIVE FOOD PANEL TO AID IN SELECTION OF AN EXCLUSION DIET TO RULE OUT ADVERSE FOOD REACTIONS
Dietary trials are especially important in cases with non-seasonal pruritus.
See the information below on GI signs of food allergy for details on how to conduct a dietary trial.

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DIAGNOSIS OF ALLERGY

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STEP 3 – SENSITEST® COMPREHENSIVE ENVIRONMENTAL PANEL TO IDENTIFY CAUSAL ALLERGENS
Test interpretation should occur after the systematic rule out other causes of dermatological clinical signs and the diagnosis of atopic dermatitis has been established. The results must always be interpreted alongside the clinical history. They can then be used for allergen avoidance, general environmental management and, when appropriate, allergen-specific immunotherapy.

Recommended for dogs presenting solely with ear signs and are included alongside the **SENSITEST® food and environmental indicator screens in our Ear Profile package. ⁺Canine only tests.*

RESPIRATORY ALLERGIES

STEP 1 – RULE OUT OTHER CAUSES OF RESPIRATORY DISEASE BY COMPLETING FULL WORK-UP

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DIAGNOSIS OF ALLERGY

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STEP 2 – SENSITEST® COMPREHENSIVE ENVIRONMENTAL PANEL TO IDENTIFY CAUSAL ALLERGENS
The results must always be interpreted alongside the clinical history. They can then be used for allergen avoidance, general environmental management and, when appropriate, allergen-specific immunotherapy.

FOOD ALLERGIES RESULTING IN GI SIGNS

STEP 1 – RULE OUT OTHER CAUSES OF CHRONIC GASTROINTESTINAL DISEASE

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STEP 2 – CONDUCT A DIETARY TRIAL

- Use the dietary history alongside the negative scoring foods from the **SENSITEST® COMPREHENSIVE FOOD PANEL** to assist with selecting a suitable diet.
- This may be either a home-cooked diet with a novel food source or a commercial hydrolysed diet.
- Feed for at least 8 weeks (shown to be sufficient for the vast majority of both dogs and cats[6]), or until a good clinical response is seen. GI signs will normally start to improve within 2-4 weeks with skin signs often taking a little longer.
- Ensure all unnecessary drugs and supplements are avoided for the full duration of the trial. Even if not flavoured to enhance palatability, they could result in non-IgE mediated reactions.
- If an improvement in clinical signs is seen, the animal must then be challenged with components of the original diet to identify relevant allergens and confirm the diagnosis of food allergy, otherwise the improvement could just have been coincidence.

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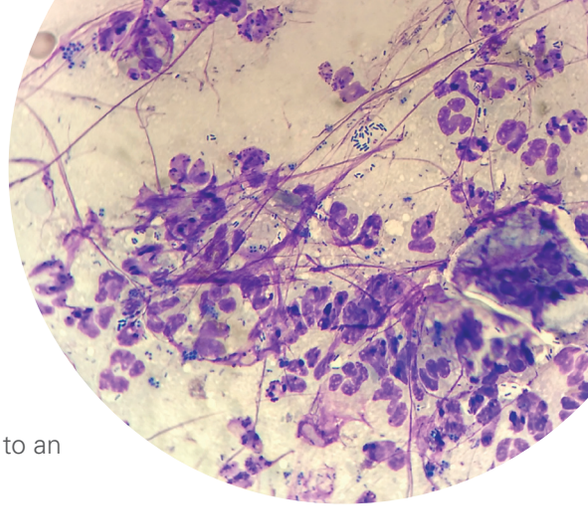
DIAGNOSIS OF ALLERGY



INFECTIONS AND INFESTATIONS

BACTERIAL AND YEAST INFECTION TESTING

Most cases of recurrent pyoderma or Malassezia dermatitis are secondary to an underlying condition such as allergy.

Culture and sensitivity
With the ever increasing threat from multi-resistant infections, identification of the organisms involved and their susceptibility to antimicrobials is becoming more and more critical.

Cytology
Cytology is useful to determine the number of bacteria or yeast present and establish if there is an overgrowth. It can be helpful both diagnostically and for monitoring the response to treatment.

Serological hypersensitivity testing
In these cases, a positive IgE response (as seen below) may indicate that the *Staphylococcus* and/or *Malassezia* are effectively acting as allergens in which case you will often see a clinical response disproportionate to the number of organisms found on the dog's skin[12-15]. In addition to topical and/or oral treatments, specific desensitisation therapies may be beneficial[16]. A positive IgG response can just indicate exposure to the organism, so is expected, even in clinically healthy dogs. A negative IgG score present in dogs with clear signs of infection may indicate an underlying immunodeficiency. Both tests can be requested individually or as part of our Complete Allergy Plus package.

EXAMPLE RESULTS

STAPHYLOCOCCUS	SCORE
IgE	1
IgG	3

MALASSEZIA	SCORE
IgE	3
IgG	4

ECTOPARASITES AND FUNGAL INFECTION TESTING

Effective rule out of fleas, lice, mites and fungal infections is critical.

Flea trial therapy
Dorsolumbar dermatitis is highly suggestive of flea allergic dermatitis, especially if seasonal. Trial therapy (including all in contact animals and the home environment) is advised in all cases of suspected allergy, even if no fleas/flea-dirt is found.

Skin scrapes
Useful to detect lice, flea dirt and *Demodex, Cheyletiella, Trombicula* and *Sarcoptes* mites (although serology is often useful in addition for detecting Sarcoptes - see below).

Sarcoptes serology
Sarcoptes scabiei are notoriously difficult to find on skin scrapes which is why detecting exposure by serological testing can be helpful. Sarcoptes IgG testing can be requested individually or as part of our Complete Allergy Plus package. A Sarcoptes PCR can then be used in positive cases to monitor the response to treatment.

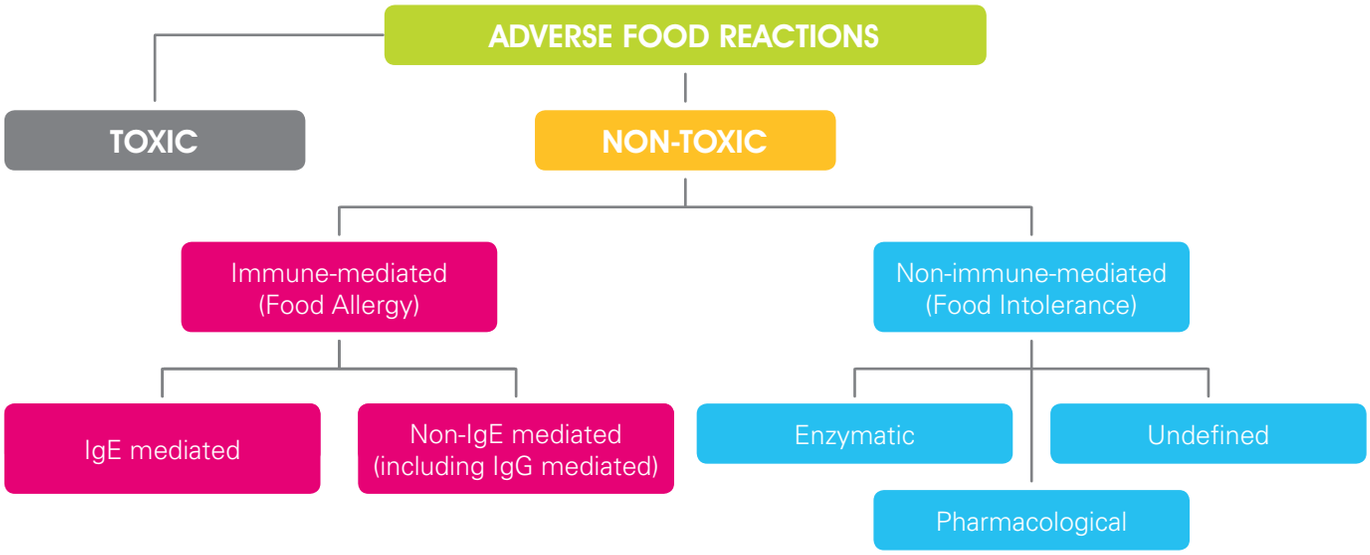
Dermatophyte (fungal) PCR
The PCR provides a faster option for fungal detection or rule out compared to fungal culture. If positive, fungal species can then be subsequently identified by dermatophyte sequencing using the original sample provided. Fungal culture is still preferable for subsequent monitoring of the response to treatment.

SECONDARY INFECTIONS ARE COMMON IN DOGS DIAGNOSED WITH ATOPIC DERMATITIS. RULING OUT THESE AND ECTOPARASITE INFESTATIONS IS IMPORTANT WHEN PREVIOUSLY WELL-CONTROLLED ANIMALS REGRESS

ADVERSE FOOD REACTIONS

When used correctly to assist in the selection of appropriate foods for a dietary trial to rule out/diagnose adverse food reactions, validated serological tests (such as **SENSI**TEST® which has a high negative predictive value)[17] can aid in the diagnosis and management of food allergies. Our comprehensive food panel can also be requested as part of the **SENSI**TEST® Complete Allergy and Complete Allergy Plus packages.

Both IgE and IgG are included in **SENSI**TEST® as not all adverse food reactions (AFRs) are IgE-mediated, and the determination of anti-food IgG can be helpful here.



DIFFERENTIATING CUTANEOUS ADVERSE FOOD REACTIONS (CAFRs) FROM ATOPIC DERMATITIS (AD)[1,7,18-23]

	CAFR	CANINE AD	FELINE AD
Age of onset	Canine peak incidence <1 year but can occur at any age in both species	6 months - 3 years; generally not >7 years	<3 years, later onset more likely to be food allergy
Response to steroids?	Poor	Good	Good
Seasonality?	No	Often, but not always	Often, but not always
Can present as just otitis?	Yes	Yes	N/A
Clinical criteria to consider	• Concurrent GI signs in 15-50% of dogs and cats • Feline head and neck dermatitis is more likely to be food allergy	See Favrot's criteria (page 8)	• Ventral abdomen, lips, chin, face and neck • Absence of lesions on rump

SENSITEST® FOOD ALLERGY RESULTS INTERPRETATION

The more IgE-positive reactions, the more likely dogs are to be food allergic[24]. Foods that are negative to both IgE and IgG should be selected for a dietary trial, as highlighted in this example. The dietary history must also always be taken into account and, where possible, cross-reactivity between similar foods should also be considered[25].

When testing for adverse food reactions, make sure the animal has not been on a restricted diet for at least two months, as the IgE reponse is relatively short-lived. We also recommend a minimum age of 6 months before testing.

PROTEINS:

MAMMALIAN

SCORES	IgE	IgG
Beef	5	4
Pork	0	0
Lamb	3	2
Venison	0	1
Rabbit	0	0
Cows' Milk	4	3

AVIAN

SCORES	IgE	IgG
Duck	0	0
Chicken	0	0
Turkey	0	0
Whole Egg	1	2

FISH

SCORES	IgE	IgG
White Fish	0	0
Salmon	0	0
Tuna (F)	0	0

VEGETABLE

Soybean	2	2

CARBOHYDRATES:

	SCORE IgE	SCORE IgG
Wheat	0	0
Barley	0	0
Rice	0	0

	SCORE IgE	SCORE IgG
Corn	0	0
Oats	0	0
Potato	3	3

Every score of 1 and above is potentially significant. Variation of class score within an individual animal's results is significant, but comparison between different animals is not.

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PLEASE SEE PAGE 4 FOR GUIDANCE ON CONDUCTING A DIETARY TRIAL

WHAT ARE THE MOST LIKELY FOOD ALLERGENS?

The most common canine food allergens (contributing to CAFRs) are - beef, dairy products, chicken, and wheat[26].

The most common feline food allergens are - beef, fish and chicken[26].

WHAT ABOUT ADDITIVE, GRAIN AND GLUTEN FREE DIETS?

Additive free – it has been reported that there are no confirmed cases of food additives causing skin disease in cats and dogs or any awareness of additives in pet foods causing behavioural issues[27].

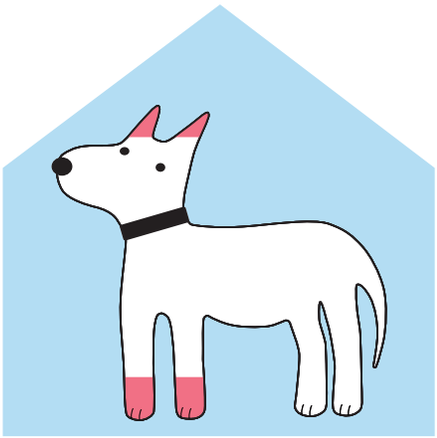
Grain free diets – wheat is reported as a food allergen in 13% of dogs and 4% of cats with AFRs[26].

Gluten free diets – gluten is not believed to be a major allergen in dogs and cats. The human conditions celiac disease and gluten ataxia do not have direct counterparts in the species, although some specific breeds (Irish Setters and Border Terriers respectively) have conditions which show similarities[28,29].

ENVIRONMENTAL ALLERGIES

Atopic dermatitis and feline asthma are both triggered by environmental allergens. The diagnosis of either condition is reliant on ruling out other causes of the clinical signs. Once the diagnosis is made, environmental serological allergy testing can be used to identify the allergens involved. Our comprehensive environmental panel can also be requested as part of the **SENSI**TEST® Complete Allergy and Complete Allergy Plus packages. Allergen avoidance, or at least reduction in allergen exposure, can then occur. Allergen identification can also enable specific desensitisation where appropriate.

DIAGNOSTIC CRITERIA FOR CANINE ATOPIC DERMATITIS[20]

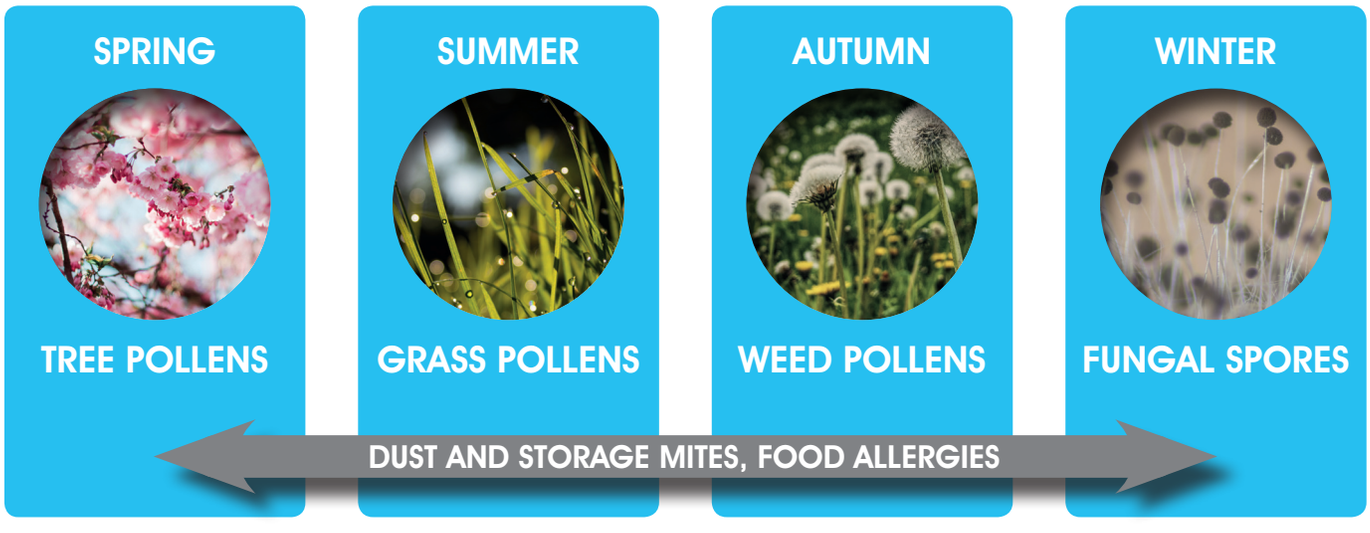


If 5 of the following criteria are met, the sensitivity and specificity for diagnosing canine atopic dermatitis is 85% and 79% respectively:

1. < 3 years of age
2. Living mostly indoors
3. Steroid responsive pruritus
4. Pruritus started before lesions seen
5. Affected front feet
6. Affected ear pinnae
7. Ear margins NOT affected
8. Dorso-lumbar area NOT affected

Significant breed variation exists for both the clinical signs seen and the age of onset[30]. French Bulldogs and Shar-Peis, for example, have been shown to have a younger age of onset for atopic dermatitis with 53.3% of atopic French Bulldogs and 66.7% of atopic Shar-Peis becoming affected in their first year of life compared to 28.5% of the total canine atopic population[31].

When testing for environmental allergies, it is important the animal is fully symptomatic at the time of testing. Certain medications may affect testing and allergen prevalence is variable dependent on the time of year and weather conditions. We recommend a minimum age of 12-15 months for environmental testing, this allows maternally derived antibody levels to subside and for exposure to a complete allergy season to occur, regardless of the time of year they were born.



SENSITEST® ENVIRONMENTAL ALLERGY RESULTS INTERPRETATION

OUTDOOR ALLERGENS (POLLENS) IgE

GRASSES	SCORE
Meadow Grass	5
Cocksfoot	4
Meadow Fescue	5
Red Top	0
Perennial Rye	2
Sweet Vernal	1
Timothy	2

WEEDS	SCORE
Ox-Eye Daisy	2
Dandelion	3
Dock, yellow/curly	0
Fat Hen (Lamb's Quarter)	0
Mugwort, common	2
Nettle	1
Plantain, English	0
Ragweed, giant/short	0
Red Clover	0

TREES & SHRUBS	SCORE
Alder, tag	0
Ash, green/white	0
Beech	2
Birch, white	2
Hazel	0
Horse Chestnut	0
Oak, red (Common Oak)	3
Privet, common	3
Scots Pine	3
Willow, black	0

INDOOR ALLERGENS IgE

STORAGE MITES	SCORE
Acarus siro	3
Glycophagus destructor	3
HOUSE DUST MITES	
D. farinae	3
D. pteronyssinus	1
DANDER	
Cat epithelia ©	0
Human Dander	0

MOULDS	SCORE
Aspergillus Mix (Amstelodami, Flavus, Fumigatus, Nidulans, Niger)	0
Alternaria alternata	0
Penicillium Mix (Camembertii, Chrysogenum, Digitatum, Notatum, Roquefortii)	0

FLEA	SCORE
Ctenocephalides felis	0

Note: A negative flea score does not preclude flea allergy, but only reflects the IgE-mediated component of this multi-component problem.

© Canine only

Every score of 1 and above is potentially significant. Variation of class score within an individual animals' results is significant, but comparison between different animals is not.

If the correct diagnostic work-up has been followed and relevant clinical signs are present, positive IgE scores are compatible with an atopic animal. In this example, the highlighted allergens are potentially significant. These should be interpreted alongside the clinical history.

Avoidance - Our results packs give clear and practical detailed guidance of how to help with avoidance/reduce exposure to environmental allergens for which the animal has shown a hypersensitivity reaction.

Allergen-specific immunotherapy (ASIT) - ASIT is a practical option where there are a number of clearly defined hypersensitivity responses. Studies show that between 50-80%[32] of cases improve on ASIT and can be ordered via Avacta Animal Health.

MANAGEMENT AND TREATMENT OF SKIN ALLERGIES

Treatment of atopic dermatitis can broadly be split into two categories, both of which are equally as important to consider:

- Proactive management – long-term strategies to prevent flare-ups
- Reactive management – treatment of itch and inflammation

In the early stages of the diagnosis and disease, it is important to provide both the animal and owner with short-term relief from the clinical signs. However, it's crucial not to forget the need for a long-term strategy for this lifelong condition. Adopting a multimodal approach is the best option for achieving sustained success.

FREE SAMPLE STORAGE SERVICE

Remember, we can store blood, free of charge for 3 months. This enables you to send a sample when you first suspect allergy. You can then do the full work up and obtain test results safe in the knowledge no drugs/dietary changes/other treatments may have influenced the results.

COST-EFFECTIVE SCREENS

Screens are a cost-effective solution for identifying if you have positive IgE scores within the 4 different allergen panels; weeds, trees, grasses and indoor. They provide a positive/negative result per panel. You can then easily expand any positive panels to access individual allergen results.

CHECKLIST BEFORE SENDING IN TESTS

- ◯ Check our handy **withdrawal guide** to ensure the animal is not on/has not recently been on any medications which could interfere with the test results. Contact our Technical Support Team to receive a copy or go to: **www.avactaanimalhealth.com/withdrawal**
- ◯ Test when the animal is **symptomatic** as many allergens are seasonal and the IgE response is relatively short-lived.
- ◯ When using our food panel, make sure the animal has **not been on a restricted diet** for at least the last two months.

REFERENCES

1. Marsella R and De Benedetto A. Atopic Dermatitis in Animals and People: An Update and Comparative Review. Veterinary sciences 2017; 4: 37.
2. Llewellyn-Zaidi AM, Evans KM, O'Neill DG et al. Large-scale survey to estimate the prevalence of disorders for 192 Kennel Club registered breeds. Canine Genetics and Epidemiology 2017; 4:8.
3. Ravens PA, Xu BJ, Vogelnest LJ. Feline atopic dermatitis: a retrospective study of 45 cases (2001-2012). Vet Dermatol. 2014; 25:95-102.
4. Mazrier H , Vogelnest LJ, Thomson PC et al. Canine atopic dermatitis: breed risk in Australia and evidence for a susceptible clade. Vet Dermatol. 2016; 27: 167-e42.
5. Nuttall T, Uri M and Halliwell REW. Canine atopic dermatitis – what have we learned? Veterinary Record 2013; 23: 201-7.
6. Olivry T, Mueller RS. Critically appraised topic on adverse food reactions of companion animals (3): prevalence of cutaneous adverse food reactions in dogs and cats. BMC Vet Res. 2017; 13:51.
7. Picco F, Zini E, Nett C et al. A prospective study on canine atopic dermatitis and food-induced allergic dermatitis in Switzerland. Vet Dermatol. 2008; 19:150-5.
8. Gaschen FP and Merchant SR. Adverse food reactions in dogs and cats. Vet Clin North Am Small Anim Pract. 2011; 41:361-79.
9. Reinero, R. Advances in the understanding of pathogenesis, and diagnostics and therapeutics for feline allergic asthma. The Veterinary Journal 2011; 190: 28–33
10. Trzil JE & Reinero CR. Update on feline asthma. Vet Clin North Am Small Anim Pract 2014; 44:91-105
11. Vapalahti K, Virtala A, Joensuu TA et al. Health and Behavioral Survey of over 8000 Finnish Cats Front Vet Sci. 2016; 3: 70.
12. Morales CA, Schultz KT and DeBoer DJ Antistaphylococcal antibodies in dogs with recurrent staphylococcal pyoderma. Veterinary Immunology and Immunopathology 1994; 42: 137- 1476.
13. Chen T, Halliwell REW, Pemberton AD et al. Identification of major allergens of Malassezia pachydermatis in dogs with atopic dermatitis and Malassezia overgrowth. Veterinary Dermatology 2002, 13: 141–1507.
14. Bexley J, Nuttall TJ, Hammerberg B et al. Serum anti-Staphylococcus pseudintermedius IgE and IgG antibodies in dogs with atopic dermatitis and nonatopic dogs. Vet Dermatol. 2013; 24: 19-24.e5-6.
15. Morris DO and DeBoer DJ. Evaluation of serum obtained from atopic dogs with dermatitis attributable to Malassezia pachydermatis for passive transfer of immediate hypersensitivity to that organism. American Journal of Veterinary Research 2003, 64: 262-266.
16. Åberg L, Varjonen K & Åhman S. Results of allergen-specific immunotherapy in atopic dogs with Malassezia hypersensitivity: a retrospective study of 16 cases. Veterinary Dermatology 2017; 28:633-e157.
17. Bethlehem S, Bexley J & Mueller RS. Patch testing and allergen-specific serum IgE and IgG antibodies in the diagnosis of canine adverse food reactions. Veterinary Immunology and Immunopathology 2012; 145:582-9.
18. Gedon KY and Mueller RS. Atopic dermatitis in cats and dogs: a difficult disease for animals and owners Natalie Clinical and Translational Allergy 2018; 8:41.
19. Favrot C, Steffan J, Seewald W et al. Establishment of diagnostic criteria for feline nonfleainduced hypersensitivity dermatitis. Vet Dermatol. 2012; 23:45-50.
20. Favrot C, Steffan J, Seewald W. et al. A prospective study on the clinical features of chronic canine atopic dermatitis and its diagnosis. Vet Dermatology 2010; 21:23-31.
21. Hobi S, Linek M, Marignac G et al. Clinical characteristics and causes of pruritus in cats: a multicentre study on feline hypersensitivity-associated dermatoses. Vet Dermatol. 2011; 22:406-13.
22. Guilford WG, Markwell PJ, Jones BR, et al. Prevalence and causes of food sensitivity in cats with chronic pruritus, vomiting or diarrhea. J Nutr 1998; 128:2790S-2791S.
23. Loeffler A, Soares-Magalhaes R, Bond R, et al. A retrospective analysis of case series using home-prepared and chicken hydrolysate diets in the diagnosis of adverse food reactions in 181 pruritic dogs. Vet Dermatol. 2006; 17:273-279.
24. Halliwell REW, Gordon CM, Horvarth C et al. IgE and IgG antibodies to food antigens in sera from normal dogs, dogs with atopic dermatitis and dogs with adverse food reactions. In: Hillier A, Foster AP, Kwochka KW (eds), Advances in Veterinary Dermatology Vol 5, Blackwells, Oxford, pp28-35 2005.
25. Bexley J, Nuttall TJ, Hammerberg B et al. Co-sensitization and cross-reactivity between related and unrelated food allergens in dogs - a serological study. *Vet Dermatol* 2017; 28: 31-e7.
26. Mueller RS, Olivry T, Prélaud P. Critically appraised topic on adverse food reactions of companion animals (2): common food allergen sources in dogs and cats. BMC Vet Res. 2016;12:9.
27. Jackson, HA. Food and the Skin: Myth Vs Fact. In Proceedings BVDSG Autumn meeting, Stansted 2018.
28. Stassen QEM, Koskinen LLE, Steenbeek FG et al. Paroxysmal diskinesia in border terriers: clinical, epidemiological and genetic investigations. Journal of Veterinary Internal Medicine. 2017; 31:1123-31.
29. German A, Hall E, Day M. Chronic intestinal inflammation and intestinal disease in dogs. Journal of Veterinary Internal Medicine. 2003;17:8-20.
30. Hensel P, Santoro D, Favrot C et al. Canine atopic dermatitis: detailed guidelines for diagnosis and allergen identification. BMC Vet Res. 2015; 11:196.
31. Wilhem S, Kovalik M, Favrot C. Breed-associated phenotypes in canine atopic dermatitis. Vet Dermatol. 2011; 22(2):143-9.
32. Jackson HA and Mueller RS. Atopic dermatitis and adverse food reactions. In: BSAVA Manual of Canine and Feline Dermatology 2007, 3rd edn, ed. H.A. Jackson and R. Marsella, 130-140. BSAVA, Gloucester, UK.

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WHY SEROLOGICAL TESTING?

Although intradermal testing was once considered the "gold standard" for the diagnosis of allergic disease, more recent evidence has suggested that the sensitivity and specificity of intradermal vs serological testing is comparable[20]. Furthermore, serological testing is quick and easy with no need to refer. Extensive clipping and sedation are not usually required and the test is not as influenced by existing skin pathologies or medications (see our allergy withdrawal guide for further information).

WHY **SENSI**TEST®?

- Since 1999 we've been assisting veterinary surgeons with their diagnosis of allergies in dogs, cats and horses.
- Our team of leading research and development scientists are highly regarded within the dermatology field, having submitted clinical papers to and presented at successive World Congresses of Veterinary Dermatology since 2008. We work alongside leading figures and companies in veterinary dermatology.
- **SENSI**TEST® allergy tests use a monoclonal antibody to detect allergen-specific IgE antibodies, making them very specific and reliable.
- Tests are manufactured in our Yorkshire laboratory allowing for end to end control throughout the process with a specific focus on UK native species of plant allergens. The laboratory is ISO9001 (2015) accredited.
- Our dedicated, knowledgeable Technical Support Team and Sales force, made up of highly trained individuals, are on hand to provide advice and assistance. Additional support is available from our Veterinary Advisor and consultant Veterinary Dermatologists when required.
- Dedicated client support literature and website to inform your clients and aid compliance.
- Personalised results packs sent out with every test.
- Storage facility to hold samples free of charge for 3 months when you suspect allergy in your case work-up but are not ready for serological analysis.
- Free pre-paid UK postal packs to send in your sample submissions.
- Results provided within 2-8 days from receipt of sample.

TO SUBMIT A SENSITEST® ALLERGY TEST, SIMPLY REQUEST A SUBMISSION BOX FROM OUR TECHNICAL SUPPORT TEAM, OR IF YOU HAVE AN URGENT SAMPLE TO SEND, DOWNLOAD A SUBMISSION FORM AND FREEPOST LABEL AT WWW.AVACTAANIMALHEALTH.COM/SUBMIT

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