

# A complete nutritional approach to dermatosis

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During a consultation, vets are often expected to deliver a 'quick fix' for owners whose dog or cat exhibits a skin problem and to provide a definitive answer and treatment instantly. While ectoparasites or infectious causes can often be identified relatively quickly, the reality is that such client pressure can sometimes lead to options being chosen such as allergy testing, anti-pruritic medications and intradermal tests as a short-term solution. However, studies show that such measures have questionable efficacy as diagnostic tools in dogs and cats,<sup>2,4,5,7</sup> particularly, in the case of nutrient intolerance. Solving a skin disorder problem can be a lengthy process. As skin is the largest organ, it occupies 12% of an adult dog's body weight. It is important to educate owners from the very beginning that a thorough, long-term work up is required to ensure success.

Nutrition has a special place in dermatology, not only as an essential factor in skin health, but also as management. Not surprisingly, pruritus is considered one of the major presenting signs for skin problems – usually in 30-40% of cases. Exclusion of the common causes (ectoparasitism [fleas], skin infections) should be the first step of the diagnosis for the workup of the pruritic dog.

## ELIMINATION DIETS

Veterinary dermatologists agree that elimination diets constitute the only way to confirm the presumed diagnosis of nutrient intolerance, either in canine or feline species.<sup>3, 4, 5, 11, 12, 15</sup> Indeed, they will be performed after 'suspicion diagnosis' based upon each individual pet's clinical signs and history. The objective of the elimination diet is to



provide dietary substances to which the animal has not been sensitised in the past. The aim is to strictly limit protein and carbohydrate sources for a specific period and this is best achieved by using a diet with an extensively hydrolysed protein source to reduce the risk of reaction. To rule out nutrient intolerance as a cause of dermatosis, an elimination diet is recommended for six to eight weeks.<sup>11</sup> The lower the allergenic potential of the diet, the more reliable the results.<sup>8</sup>

**Step one** – a dietary elimination of the potential allergens – withdrawal of the animal's usual diet and replaced by a diet not likely to contain other antigens that the animal may be sensitive to;

**Step two** – the dietary challenge, or re-challenge, or provocation test, ie. the re-introduction of the animal's usual diet; and

**Step three** – interpret the trial. When signs disappear on the elimination diet and reoccur on the former diet – diagnosis of nutrient intolerance is made. All steps are necessary to be sure of the diagnosis.

For an even more precise diagnosis, sequential testing of each individual ingredient of the usual diet will enable identification of the offending allergen(s). However, some owners will choose not to do a dietary challenge due to fear of the patient's clinical signs recurring.

### BREED

When assessing an animal with a dermatological issue, considering the breed is vital. The potential of breed-specific problems can be extensive. An example of this would be primary mucinosis in the Shar Pei or secretory otitis media in the Cavalier King Charles Spaniel.<sup>13</sup>

### FOOD VERSUS ENVIRONMENTAL

When finding it difficult to distinguish between food and environmental causes, a dietary link to aetiology is relatively easy to manage. Diet may trigger food-induced-canine atopic dermatitis, as described within the summation theory from the American College of Veterinary Dermatology (ACVD)-appointed Task Force on Canine Atopic Dermatitis.<sup>9</sup> Where this is so, placing a patient on a strict elimination diet is invariably easier (with both a diagnostic and long-term management view) than positively identifying an environmental allergen, executing complete avoidance, de-sensitisation or immunosuppression.

### LONG-TERM NUTRITIONAL SUPPORT

Many cats and dogs with a nutrient intolerance can be successfully transitioned and maintained, long-term, on a specialist diet. For cats and dogs, where a nutrient intolerance is not proven to be the underlying cause of dermatosis, diets can still be used as an integral part of patient management. With monitoring revisits, as well as a proactive and measured response from both the owner and veterinary team, the frustrations which come with dermatology cases can slowly evolve to an appreciation of the skin as a sometimes sensitive, sometimes obstinate organ. Many chronic skin conditions are rarely resolved, but effective, safe, affordable and convenient life-long

management can often be made a reality.

### REFERENCES AND FURTHER READING

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