

Don't Dread the Diet Trial: Food Allergies

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Adverse food reactions (AFR) are an important differential diagnosis in dogs and cats presenting with nonseasonal pruritus and recurrent otitis externa. While clinical signs of food allergy often overlap with atopic dermatitis, accurate diagnosis is critical, as AFR is one of the few allergic conditions that can be effectively controlled with dietary management alone.

Clinical signs of food allergy include nonseasonal pruritus, recurrent skin and ear infections, recurrent anal sacculitis and anal pruritus, and, in a subset of cases, gastrointestinal signs such as soft stool, increased defecation frequency, and flatulence. Historical clues may aid differentiation from atopy: food allergy can occur at any age but should be prioritized in patients <6 months or >4 years of age, particularly with nonseasonal disease. In contrast, atopic dermatitis typically presents between 1–3 years of age and often begins as seasonal before progressing.

A strict dietary elimination trial remains the gold standard for diagnosis. Serum and salivary food allergy testing are unreliable due to poor repeatability and variable predictive value and should not be used to guide diagnosis or diet selection. Over-the-counter diets are also inappropriate for diagnostic trials due to ingredient variability and risk of cross-contamination.

Successful diet trials require absolute dietary exclusivity. Patients must consume only the prescribed diet, eliminating all treats, flavored medications, supplements, and environmental exposures to other food sources. Consistent, minor deviations can invalidate results, making thorough client education and communication essential.

Diet selection should be individualized based on the patient's dietary history and preferences. Options include novel protein diets, hydrolyzed protein diets, and balanced home-cooked formulations. Novel protein diets should utilize ingredients to which the patient has had minimal prior exposure, although cross-reactivity among related proteins may occur. Hydrolyzed diets offer an alternative by reducing protein size below the threshold for immune recognition, though efficacy depends on degree of hydrolysis.

Clinical improvement is typically observed within 3–8 weeks, with most patients demonstrating a significant reduction in pruritus by 5 weeks. If no improvement is observed by ~6 weeks, food allergy is unlikely. Antipruritic therapy (e.g., glucocorticoids, oclacitinib) may be used initially to maintain patient comfort but should be tapered to assess true response to diet.

Interpretation of trial outcomes requires a structured approach. Complete resolution of clinical signs supports a presumptive diagnosis of AFR, which should be confirmed via dietary challenge with the original diet. Recurrence of pruritus within hours to days confirms food allergy. Partial improvement may indicate concurrent atopic dermatitis, necessitating continued multimodal management.

Chronic otitis externa can complicate interpretation of diet trials and should be fully resolved prior to assessment. Similarly, secondary infections, ectoparasites, and other pruritic conditions must be addressed before and during the trial to avoid confounding results.

Long-term management of confirmed AFR typically requires lifelong adherence to a therapeutic diet, although some patients may transition to alternative diets that avoid identified allergens following systematic ingredient challenges. In cases of incomplete response, concurrent atopic dermatitis should be considered.

Feline diet trials present additional challenges, including palatability issues, multi-cat environments, and grazing behavior. Strict control of dietary intake remains essential for accurate diagnosis.

In summary, diagnostic diet trials are a critical tool in the evaluation of allergic skin disease. Success depends on strict compliance, appropriate diet selection, management of confounding factors, and clear client communication. When properly executed, diet trials provide a reliable method to diagnose and manage adverse food reactions in small animal patients.