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ADVERSE FOOD REACTION + KIDNEY DISEASE IN DOGS: UNDERSTANDING MORE

ADVERSE FOOD REACTIONS EXPLAINED

Issues we often loosely refer to as a 'food allergy' belong, in fact, to adverse food reactions (AFR). Because the signs of food intolerances and food allergy are similar, these conditions can often be clinically impossible to distinguish. Typical signs are cutaneous issues, mostly linked to scratching and inflamed skin (with consequent cutaneous lesions +/- potential hair loss), but also digestive signs such as diarrhoea, vomiting, rumbling (borborygmi), and flatulence.

WHAT ARE FOOD ALLERGENS?

Food allergens are mostly proteins (or glycoproteins), whose size allows recognition by a sensitive or over-reactive immune system. The proteins are made up of chains of amino acids, the weight of which varies according to their nature.

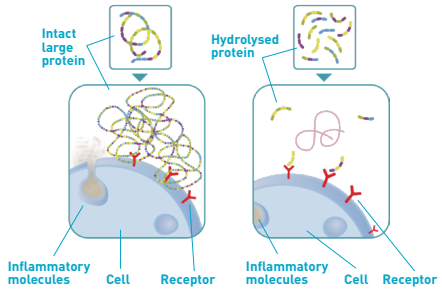
Amongst major ingredients involved in food allergies, beef is frequently mentioned. A dog allergic to beef may react to another ingredient that shares some allergic protein with beef (cross-reactivity phenomenon). Therefore, the strategy of feeding a 'hydrolysed protein' diet is often recommended.

DID YOU KNOW?

Unlike usual practice in human allergology, the only way to confirm if a dog is affected by an adverse food reaction is via an elimination diet trial. Tests from blood, saliva, or hair samples may yield incorrect results.

WHAT EXACTLY ARE HYDROLYSED PROTEINS?

These proteins have been broken down to a small enough size that the risk of the body's defence system recognising and reacting to them has been minimised. This means that consuming these proteins has a very low risk of triggering an adverse reaction. Foods based on hydrolysed proteins are sometimes recommended for other specific issues because they are highly digestible.



Case 1: release of mediators, triggering allergic flare and signs such as itch.

Case 2: no immune recognition of the hydrolysed protein, no release of the mediators.

HOW DO YOU IDENTIFY AN ADVERSE FOOD REACTION?

This process should be carried out under vet supervision.

To determine the cause of your dog's reaction, you will need to:

- Provide one diet exclusively for 8 weeks (hydrolysed diet or a protein source that your dog hasn't eaten before).
- If signs disappear, your veterinarian may suggest that you reintroduce the food your dog ate before it tried the new diet and see whether the signs reappear.

If signs reappear, an adverse food reaction may be confirmed (whereas if not, another cause may be behind your dogs signs, such as environmental allergy).

In everyday life, an elimination diet can be a challenge. First there is diet choice. The food must, of course, be balanced, and this is something that is hard to achieve with a typical 'homecooked' diet. Using a novel protein diet (which contains a protein source your dog hasn't eaten before) can also present challenges. You will have needed to keep a detailed record of what your dog used to eat (and dogs do not tell us everything they eat!). In addition, not only main food has to be taken into account but also any supplements, titbits or flavoured medications. It is for these reasons, that many vets will recommend using a hydrolysed diet.
You will then have to abide strictly by the diet as recommended by your veterinarian. Any break from the discipline could mean your efforts have been in vain. By strictly following their nutritional instructions, your vet will be able to properly identify the issue and introduce the most appropriate management plan. The effort will be worthwhile to find the most appropriate long-term solution.

MANAGING DOGS WITH AN ADVERSE FOOD REACTION

When an adverse food reaction has been identified, a major part of the nutritional management relies on avoiding consumption of the protein(s) that are causing the problem. Here too it will be vital to stick strictly to your vet's dietary recommendation. This is because, when an animal has been diagnosed as having an adverse food reaction, it is for life!

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KIDNEYS, VITAL ORGANS

Most people know kidneys eliminate waste in urine, but there's more to it than that. The kidneys are filters working 24/7: they return water and nutrients the body needs to the blood and excrete waste products (like urea from protein metabolism) and excess water in urine.

They also fulfil key functions to maintain fluid balance, blood pressure, the formation of red blood cells and certain vitamins. This makes these organs truly vital.

SOME KEY FIGURES

- More than 99% of the fluid that is filtered by the kidneys is returned to the blood, less than 1% is excreted.
- The kidneys of a healthy 25 kg dog will filter up to 180 litres per day.
- In 24 hours a healthy 25 kg adult dog will urinate about 1/2 to 1 litre of urine.

WHAT IF YOUR PET HAS KIDNEY PROBLEMS?

The most common form of kidney disease in dogs and cats develops very slowly over time and consequently is known as chronic kidney disease (or CKD). Despite new diagnostic tests that have become available in past years, sadly most pets are diagnosed with kidney disease when the kidneys have already lost about 75% of their function.

This makes it vital to support the remaining renal function. Studies have shown that there are real benefits in providing animals with kidney issues a diet with a low phosphorus content and high-quality proteins that will produce little waste. When a dog with an adverse reaction to a certain type of protein develops chronic kidney disease, finding an appropriate food for it can be a real challenge. Yet, this is important in the dietary management of that dog.

TRUE OR FALSE?

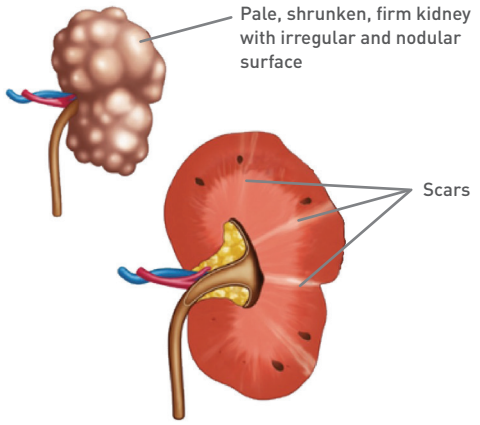
Animals with kidney disease should eat a low-protein diet to support their kidney function.

FALSE. Reducing protein intake may improve their clinical signs (linked to urea) and help the subset of pets with proteinuria (losing protein in urine), but it is important that pets get enough proteins to maintain vital function: moderate levels of protein is the target for most pets with CKD.

Animals with kidney disease need highly digestible protein.

TRUE. High digestibility ensures that the pet benefits fully from all the proteins eaten and helps reduce protein waste.

ANATOMY OF A DISEASED KIDNEY



TO MONITOR YOUR ANIMAL'S HEALTH EFFECTIVELY:

Chronic diseases evolve over a period of time. The enclosed notebook will help you to accurately track this development.

- You can also keep a note of other details such as how much water your dog drinks or any other particular events (loss of appetite, weight loss, changes in urination, lack of vitality, etc.)
- You can note down any signs such as itching, spots, redness, hair loss, excessive grooming as well as diarrhoea or any other digestive issues.

This information will be very valuable to your vet and help them to keep your dog in the very best health.