



KIDNEY PROBLEMS

FACT SHEET 19

THE ROLE OF THE KIDNEYS

All animals have a pair of kidneys located in the abdomen, one either side of the spine and just tucked up under the ribs. Their main functions are to:

- Eliminate waste products from the body
- Help maintain fluid balance
- Assist in regulation of blood pressure
- Produce erythropoietin, a hormone involved in the production of red blood cells

Blood, carrying waste products, enters the kidneys through the renal arteries, which branch into smaller and smaller vessels within the kidney. These end as complex networks of capillaries, known as glomeruli, through which the blood is filtered.

The filtered material is collected and, as it passes along to the next stage, water and other vital substances are absorbed back into the bloodstream. This process of reabsorption is vital to good health. Under normal circumstances, some substances are completely reabsorbed, such as glucose, while others, such as urea (a waste product), are completely eliminated. Of all the fluid filtered out, some 99% is reabsorbed and as little as 1% ends up as urine. This eventually passes into the bladder for storage.

The kidneys have a large functional reserve and can lose over 75% of their capacity before any symptoms of kidney disease can be seen. Despite this fact, kidney problems are fairly common in both dogs and cats.

THE SIGNS AND SYMPTOMS OF KIDNEY FAILURE

There are basically two common forms of kidney failure:

- **Acute kidney failure**

This is sudden in onset and caused by damage to the kidneys by infection, dehydration, poisoning or haemorrhage.

Symptoms include:

- Vomiting
- Diarrhoea
- Lethargy
- Dehydration
- Anorexia (not eating)
- Abdominal pain
- Weight loss

The build-up of waste products, especially urea, leads to a situation known as uraemia, causing the breath to smell unpleasant. Treatment needs to be carried out promptly to limit damage.

- **Chronic kidney failure**

This is more common, with a progressive deterioration of kidney function.

Symptoms include:

- Increased thirst
- Increased urination
- Periodic vomiting
- Picky appetite
- Dehydration
- Poor coat and general health
- Ulceration of the mouth and gums
- Bad breath
- Anaemia
- Weakening of the bones, due to imbalances in the calcium and phosphorus levels in the blood

THE DIAGNOSIS OF KIDNEY FAILURE

It is important that you consult your vet if you suspect that your animal has kidney problems. The history and clinical signs will often be sufficient to arrive at a diagnosis, but your veterinary surgeon may take blood samples to provide a more accurate picture of your pet's condition. Using a blood sample, your vet will measure 2 values, urea and creatinine. These will help to determine the best course of treatment and will assist your vet in giving a prognosis.

TREATING KIDNEY DISEASE

DIET

The correct diet is of vital importance in the long-term management of kidney problems. The ideal diet should contain:

- Reduced levels of protein. It is a good idea to avoid excess protein, which has to be excreted by the kidneys. Chicken and egg are ideal protein sources and are often used as the basis of specialised kidney diets
- Reduced levels of sodium (salt). Excess sodium can lead to an increase in blood pressure or retention of fluid within the body
- Reduced levels of phosphorus

HOW DENES CAN HELP

FEEDING

From the Denes range of pet foods, the following recipes have lower protein, sodium and phosphorus levels than our other recipes. They can be used in the management of some cases of kidney disease, along with our herbal remedies. The levels of protein, salt and phosphorus are given on a dry matter basis in brackets after each recipe:

DOGS – canned foods

- **Senior With Chicken, Lamb & Rice** (22.9%, 0.2%, 0.62%)
- **Senior With Turkey, Rabbit & Rice** (22.9%, 0.25%, 0.62%)
- **Low Calorie With Chicken & Liver** (33.33%, 0.19%, 0.86%)

CATS – canned food

- **Older With Turkey & Lamb** (39.39%, 0.67%, 1.63%)

Denes fact sheets numbers 28 Cats and 28 Dogs contain more detailed nutritional information on our recipes. This can be useful in checking the suitability of our foods for dealing with a particular kidney problem.

HERBAL REMEDIES

Herbal remedies can be used alongside diet to help deal with kidney disease. The following Denes products are useful:

- **Denes Kidney Tablets**

The combination of herbs in this remedy acts specifically on the urinary tract, helping not only with kidney failure, but also with other urinary problems, such as bladder stones and cystitis. Herbs included are:

Buchu, a diuretic herb, which helps flush out waste products and toxins

Juniper to help eliminate infection

Bearberry to help eliminate infection

Parsley Piert, a soothing herb to assist healing

- **Denes Greenleaf Tablets**

This remedy is based on stinging nettles and can be used alongside Denes Kidney Tablets.

Stinging nettles help eliminate waste products and can help detoxify the body

- **Denes Milk thistle Plus Tablets**

This remedy is useful in more severe cases. This supplement is based upon two liver tonics **Dandelion** and **Milk Thistle** and will help by removing toxins:

Dandelion and Milk Thistle can both help detoxify the body when it is under strain

- **Denes All-in-One Tablets**

This is a herbal supplement that supplies a wide range of vitamins, minerals and trace elements. Animals with impaired kidney function normally benefit from extra supplementation. All-in-One Tablets contain:

Seaweed, a good source of vitamins and minerals

Watercress, which is high in iron

Parsley, a good tonic for the digestion and a mild diuretic

Elderberry, rich in iron and good for anaemia

Wheat germ oil, rich in vitamin E and will help improve coat condition

HOMEOPATHIC REMEDIES

Homeopathy provides another way of supporting the kidneys. There are two remedies which may help:

- Denes **Phosphorus 30c** where is a marked increase in thirst
- Denes **Arsenicum album 30c** if there is general debility or poor appetite

Denes Kidney Tablets, Greenleaf Tablets, Milk Thistle Plus Tablets, All-in-One Tablets and **Homeopathic Remedies** can be used singly or in combination and are safe to use alongside any conventional treatment that your vet may prescribe.

If you have any queries concerning your pet's health or feeding problems, you can contact us for free pet care advice by:

- Visiting our website www.denes.com
- Emailing us at info@denes.com
- Calling us on **01273 325364** Mon-Fri, 9am – 12Noon
- Writing to us at:
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