



## CHRONIC KIDNEY DISEASE

**Chronic Kidney Disease (CKD)**, is one of the most common conditions affecting older cats, and in most cases it is progressive over time so that there is a gradual decline and worsening of disease.

The kidneys have many functions, including: ***maintaining fluid balance in the body; producing certain hormones; regulating electrolytes in the body; and filtering blood for excretion of waste products via the urine.*** In CKD, all of these regulatory processes can be interfered with, causing a wide range of different signs.

One of the first indicators of disease is the reduced ability to produce concentrated urine, so to get rid of waste products, the kidneys produce larger volumes of dilute urine, with a subsequent increase in drinking to compensate. As the disease progresses, other symptoms may appear such as depression; lethargy; decreased appetite; vomiting; dull coat; bad breath and mouth ulcers.

Although CKD is not a curable or reversible disease, appropriate support and care can both increase your cat's quality of life, and slow down the progression of disease.

**DIETARY THERAPY** is the single-most beneficial treatment for cats with CKD, especially in the later stages of disease, however it may be prudent to introduce a new diet before the effects of uraemia (*toxins in the bloodstream*) develop. Prescription renal diets are formulated to reduce the work-load on the kidneys, and reduce subsequent toxin build-up. They are also energy-dense to help your cat maintain its bodyweight and condition.

As these cats are producing abnormally large amounts of urine, many become severely dehydrated. **MAINTAINING ADEQUATE FLUID INTAKE** can be achieved by providing several sources of drinking water around the home, in a variety of dish materials such as ceramic, glass and metal. Many cats enjoy drinking from a running water source, so leaving an accessible tap dripping or the use of cat drinking fountains can help increase water intake. Feeding a wet diet also increases fluid intake, as well as adding water to the food. Cats suffering from dehydration will benefit from admission to the veterinary surgery for intravenous fluids for a few days to help correct fluid balance.

Build-up of toxins in the blood stream, results in **NAUSEA**, so ensuring appetite and appropriate food intake is maintained is important. Warming up the food to body temperature can help increase a cat's interest in food, stimulating their sense of smell. Hand-feeding and offering little and often, may also help. The most important thing for CKD cats is that they eat something, so if they refuse to eat a prescription renal diet, anything is better than nothing. Anti-nausea medication and appetite stimulants may be prescribed by your vet, as well as treatment for ulcers that can occur within the mouth and stomach due to the secondary effects of uraemia.

Regular blood pressure readings should be obtained, as **HYPERTENSION (*high blood pressure*)** is a common complication of CKD, and can cause further problems, so should be treated accordingly.

Regular blood tests to measure your cat's **PCV (*Packed Cell Volume*)** may be advised also, as **ANAEMIA** can be another complication of CKD.

A **URINE PROTEIN : CREATININE (*UPC*) RATIO** is a test that can be carried out on a urine sample as a periodic monitoring tool, as increasing loss of protein in the urine is a good indication of decline in kidney function and disease progression.

**URINARY TRACT INFECTIONS (*UTI's*)** are common in cats with CKD as the dilute urine is not effective at destroying microorganisms. UTI's can cause further kidney damage, and certainly reduce the cat's quality of life, so it is recommended a regular urinalysis is performed (*every 3-6 months*), as these infections can often be clinically "silent".