



KIDNEY DISEASE IN CATS

Kidneys are made of thousands of little pumps called nephrons and cats have about two-thirds the number of nephrons than, for example, dogs. Perhaps this is why kidney disease is so **common in older cats**.

Kidneys have various roles but one of their most important **roles** is to conserve water, ie **hold water in the body**. When kidneys aren't working so well, excess water is lost so the cat will **urinate more**. To replace this water, the cat will then **drink more**. Initially, these changes are very subtle and even keen observers can't see the change in their cat's drinking or urinating. The clinical result of this is **dehydration** that can be **picked up with blood tests** and **dilute urine** (which can be assessed with a urine test).....even before the cat's owner has noticed any change!

Kidney disease can have specific causes such as infections, cancers or genetic problems but in **many cases** in cats, **no specific cause** can be found even with thorough investigations and tests.

Fortunately, kidney disease **progresses very slowly** in most cases. **Specific diets** for cats with kidney disease help slow the progression (see renal nutrition sheet). We can **slow down** the process even further **if we can pick up side effects** before these side effects cause more damage to the kidney. Some of these side effects are:

- 1. High blood pressure:** this occurs in approximately **25%** of cats with kidney disease. Measuring blood pressure of cats is done in much the same way that your blood pressure is tested. As this is more of a cat problem, many practices don't have the **facilities** or **experience** to test for this. In most cases, blood pressure control is straightforward with daily medication
- 2. Low blood Potassium:** is measured by blood tests. Potassium lowering can lead to the blood stream becoming acidic and **further damage** to the kidneys. This is also managed by regular medications.
- 3. High blood Phosphate:** is **usually controlled by** renal **diets** but if cats just will not eat the specific diets or this rises despite them, an additional paste can be given.
- 4. Protein loss in the urine:** is relatively rare but can be controlled with medication.
- 5. Urinary Tract Infections:** are more likely to occur when urine is dilute (concentrated urine kills the bacteria). This not only causes more damage but also is uncomfortable!
- 6. High blood levels of urea or creatinine:** These are our main measures of dehydration in cats with (and without!) kidney disease. As the blood levels of urea rise, the cat **can feel nauseous**. We teach very dedicated owners how to give fluids under the skin daily. Sometimes, it's appropriate for the cat to be hospitalised to have IV fluids (a drip).

Testing these parameters is ideally done **every three months** (and less often if the disease is in very early stages). By testing regularly, we aim to not only keep your cat **living longer** but to keep your cat **happier for longer!**