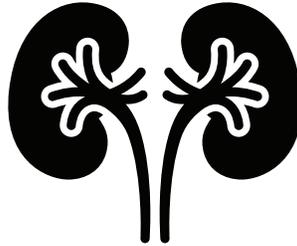


## WHAT DO YOU FEED YOUR CAT WITH CKD?

With careful monitoring and management, cats with **Chronic Kidney Disease (CKD)** can live happy, comfortable lives.

### WHAT DO KIDNEYS DO?

**The kidney is the body's filter.** During the day, the body makes waste that it cannot use and adds it to blood for transport to the kidney. The kidney then filters the waste out of the blood and into urine for disposal.



### WHAT CAUSES KIDNEY DAMAGE?

Many different things can cause kidney damage and, unfortunately most of them cannot be tested for or prevented. **Once damage occurs, the kidney becomes less efficient at its job.**

## WHAT DOES THAT MEAN?

With kidney damage, gradually more and more of the kidney loses function. **After 60-75% of the kidney stops functioning, veterinarians can measure the increased amounts of waste products in the blood because they can't be filtered out.**

We measure the following to determine the health of your cat's kidneys:

- > **Blood Urea Nitrogen (BUN):** When your cat digests protein from his or her diet, the body breaks off the nitrogen components and disposes of it through urine as urea. A buildup of nitrogen does not further damage the kidneys, but can make patients feel nauseous and inappetent.
- > **Creatinine:** This is a waste product produced constantly through normal muscle cell cycles. Creatinine levels in the blood provide a fairly accurate picture of your cats' kidneys' ability to filter out waste products and is less likely to change, even if your cat doesn't want to eat much.
- > **Phosphorus:** This is part of most proteins and its presence in the blood is a product of protein digestion, just like BUN. However, *unlike* BUN, an increase in phosphorus can lead to further kidney damage and it can predict worsening disease.
- > **Urine Specific Gravity (Concentration):** If your cat is dehydrated, his or her body conserves water and produces a darker urine with very little water. Since there is less overall urine being made, waste products may also measure as high. We can tell that the kidneys are doing their job by comparing the amount of waste products to the urine concentration. If the waste products are high in the blood, but the urine is clear (not concentrated), kidney damage is most likely.



## THE 4 STAGES

Veterinarians measure the progress of your cat's CKD in four stages:

**Stage 1:** Creatinine below 140umol/L;  
65% lost function

**Stage 2:** Creatinine 140-249 umol/L;  
66-75% lost function

**Stage 3:** Creatinine 250-440 umol/L;  
76-90% lost function

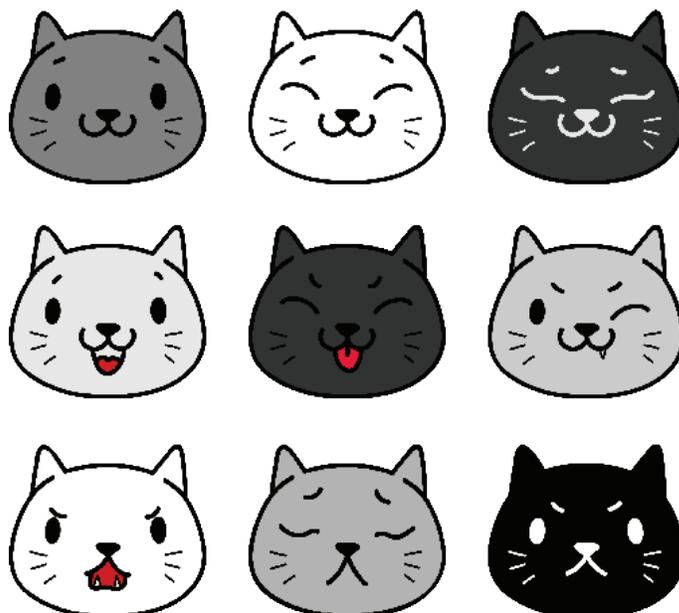
**Stage 4:** Creatinine above 440umol/L;  
more than 90% lost function

A patient's stage helps us determine which kinds of management, both diet and medication, will slow the progression, minimize the risk of further kidney damage, and keep your cat's quality of life higher.

## HOW DOES MY CAT FEEL?

Every cat is different, but cats with CKD can have a good quality of life through management of their most common symptoms:

- > **Nausea:** Many of the waste products that build up in the blood of cats with CKD make them feel nauseated.
- > **Poor Appetite:** Most cats don't want to eat when they don't feel good. Inappetence can be a side effect of nausea.
- > **Weight Loss:** Patients with CKD often lose both muscle and fat as a consequence of poor appetite.
- > **Dehydration:** Diseased kidneys have trouble concentrating urine, resulting in dehydration from increase water loss.



## HOW DOES FOOD HELP?

We cannot reverse kidney damage, but we can manage symptoms to minimize future damage from waste product buildup, which helps to keep your cat comfortable and happy.

- > **Nausea:** Reduce the phosphorus in the diet with low phosphorus foods like egg whites, chicken and tuna.
- > **Poor Appetite:** Kidney diets smell good to cats and are high in calories, which means a little goes a long way.
- > **Weight Loss:** High calorie diets help when cats don't want to eat. Support muscle mass with low-phosphorus proteins.
- > **Dehydration:** Try canned food, which has a higher water content or adding low-sodium broth or tuna juice to their water bowl.

## HOW IS PRESCRIPTION FOOD DIFFERENT?

It might seem strange to call food a prescription, but research shows that diet change is the best thing we can do for pets with kidney disease to help them feel better and live longer, happier lives. **For patients with CKD, diet is a more important prescription than most medicines.** Prescription diets are specifically tailored to meet the needs of patients with specific diseases. Changes that make kidney diets special:

- > Lower amounts of high-quality, **easy-to-digest proteins**
- > **Low in phosphorus** to limit additional kidney damage
- > **Added fish oil** (omega-3 fatty acids) to protect against inflammation
- > **Enriched in natural antioxidants** such as vitamins C and E

## WHO MAKES A PRESCRIPTION DIET FOR KIDNEY DISEASE?

Talk with your veterinarian about finding the right diet for your cat. Options include:



- > Purina NF
- > Hill's Prescription Diet K/D
- > Royal Canin Renal Support
- > Blue Veterinary Diet K + M



## CHANGING DIETS

Changing your cat to a kidney prescription diet can be challenging. Take the time to gradually switch your cat to the kidney diet over the course of 1-3 weeks. Every 3-4 days, mix 25 percent more of the new pet food into your cat's old pet food.