UNDERSTANDING YOUR DOG'S KIDNEY CONDITION

VETERINARY CLINICAL NUTRITION

PURINA PRO PLAN VETERINARY DIETS

Understanding your dog's kidney condition

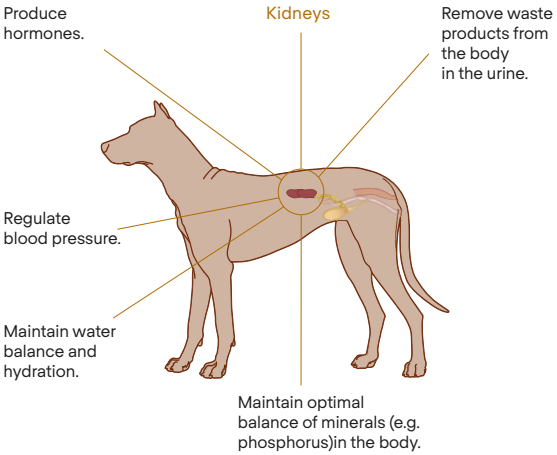
Being told that your dog has chronic kidney disease is likely to have been upsetting for you. However, be reassured that with appropriate care, and commitment from you, you can really help your dog to have the best quality of life.

This leaflet will help you understand your dog's condition, and how feeding a diet specifically formulated to help support kidney function and slow down disease progression is one of the most important strategies that can help manage your dog's condition and make him/her feel better.

Why are the kidneys so important?

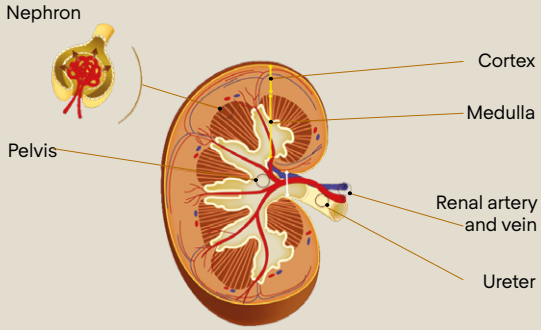
Dogs, just like us, have two kidneys located in the abdomen under the lumbar spine.

Your dog's kidneys perform a number of vital functions including:



Most processes occur in nephrons, tiny filtering units inside the kidneys. A healthy kidney contains hundreds of thousands of nephrons. They may be lost with age and disease and cannot be replaced. However, clinical signs of disease will not develop until a dog has lost about 2/3 of its total kidney function.

Chronic kidney disease in dogs



Anatomy of the kidney

In Chronic Kidney Disease (CKD), the kidneys progressively lose their ability to function properly over a period of months to years. Unfortunately, it is irreversible but appropriate management can help slow down disease progression.

What causes CKD in dogs?

By the time clinical signs of CKD develop, it is often impossible to know what caused the initial damage. A variety of factors may damage the kidneys (e.g. infections, inflammatory conditions, high blood pressure), but in many cases the initial cause of damage cannot be identified. Disease tends to progress in a similar way regardless of the initial cause. Unfortunately in the majority of cases, there is nothing that either you or your vet could have done to prevent your dog developing CKD.

What are common signs of CKD?

As kidney disease progresses, the kidneys no longer work well to remove waste products from the body and these start to build up, which can cause various signs. Your dog also loses the ability to concentrate urine and starts producing larger volumes of urine and drinking more to compensate. Increased thirst can be an early sign of CKD and should always be investigated by your vet.

Your dog may show a variety of signs relating to their kidney disease, including:

- Drinking more
- Urinating more
- Loss of appetite
- Nausea (for example, going to the food bowl or asking for food, but then turning away) or sometimes vomiting
- Weight loss and lethargy
- Unpleasant breath odour

How is CKD diagnosed?

Your vet will give your dog a thorough physical examination and discuss any changes you have noted at home. Blood and urine tests are usually performed to investigate and confirm the presence of CKD, determine its severity, and evaluate any complications that may be present. Your vet may also recommend ultrasound imaging to look at the structure of the kidneys. Your vet might also recommend that your dog's blood pressure is checked.

How is CKD treated?

The treatment your vet recommends will depend on the severity of the disease and specific signs and complications present in your dog. The main objective of the treatment is to slow the progression of the disease and minimise the symptoms so that your dog maintains the best quality of life possible. The most important element of management is feeding your dog a diet designed to support dogs with CKD.

An appropriate diet is important in helping to manage the disease, to slow its progression and to help your dog achieve a good quality of life. Reducing dietary phosphorus is key to help slow the progression of CKD. Restricting the level and type of protein also helps improve the quality of life of dogs with CKD - it helps minimise some clinical signs (e.g. nausea and reduced appetite due to toxin formation), whilst still providing energy and helping maintain healthy muscles, organs and immune function.

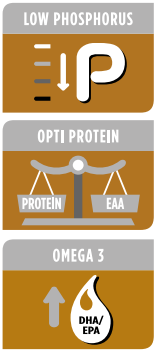
However, any diet designed for dogs with CKD is useless if the dog will not eat it. **PURINA® PRO PLAN® VETERINARY DIETS NF Renal Function™** is highly palatable to ensure your dog will eat and enjoy it despite a reduced appetite. There is both a dry and a wet product too, which can help with acceptance.

Different medications may also be needed according to the stage (severity) of the disease and the complications that arise. Treatments may be needed, for example, to control:

- Dehydration
- Blood pressure
- Nausea or vomiting
- Anaemia
- Mouth ulcers or stomach ulcers

Your vet will discuss what treatments your dog may benefit from with you. After diagnosis, it is also important to have your dog checked regularly by your vet, and to adjust treatments as needed at each check-up.

Benefits of feeding CANINE NF Renal Function™ to your dog:



Low level of phosphorus
to help slow the progression of chronic renal insufficiency

Restricted but high quality proteins
to help minimise loss of muscle and toxin formation

Omega-3 fatty acids
to help reduce renal hypertension and help support natural anti-inflammatory processes

Top tips for a successful diet transition in your dog

A gradual transition to the new diet, over up to 28 days, may be helpful in dogs with CKD. However, if your dog continues to have a poor appetite they should be reassessed by a vet to ensure other complications are not present. There are a number of considerations which may also help with a successful transition across to the new NF diet:

- Select the diet your dog is most likely to accept. Feeding wet food can help increase overall water consumption, which is helpful given dogs with CKD can easily become dehydrated, but if your dog only eats dry food then try this first.
- Introduce the diet in a non-stressful environment, away from other pets
- Don't stand over your dog – give them time and space to accept their new food.
- Mix the new and old foods together, gradually increasing the amount of new food offered and reducing the amount of the old food over time.
- Avoid food aversions by administering any medications in a different, highly palatable food, at a separate time to the dog's main meal.
- Gentle heating of wet food might help increase the aroma and tempt dogs to eat
- Palatability enhancers may be helpful e.g. **PURINA® PRO PLAN® Fortiflora®** (a probiotic supplement which many dogs find highly palatable).

Feeding guidelines for CANINE NF Renal Function™

Please see your product packaging and/or the **PURINA® PRO PLAN®** website for feeding guideline amounts. Contact your vet for more information.

For long-term use, an initial feeding period of up to 6 months is recommended, but your dog should be re-evaluated regularly and this diet can be fed long term.

As dogs with CKD can easily become dehydrated, it is important to always provide plenty of fresh drinking water and encourage them to drink. Using the wet diet or soaking the dry diet with some water can also increase fluid intake.

PURINA® PRO PLAN®: a name you can trust

PURINA® PRO PLAN® VETERINARY DIETS are backed by strong science, with the latest nutritional findings applied to bring you some of the most innovative and effective formulas.

With **PURINA® PRO PLAN® VETERINARY DIETS NF Renal Function™** wet and dry formulas, you can be confident that your dog will benefit from a diet that provides optimum nutrition whilst also supporting their kidney function.

Please note that all indications for **PURINA® PRO PLAN® Veterinary Diets** mentioned in this brochure are for the dietary support of the dog with the listed condition and do not preclude appropriate medical management. The veterinary diets should be used under the supervision of your vet.

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NF RENAL FUNCTION™

PURINA®

PetCareteam

For advice on any aspect of pet care, just ask our experts

UK: **0800 212 161** ROI: **1800 509 368**

Monday-Friday 8am-6pm. Or contact us online at

www.purina.co.uk | www.purina.ie

For more information, please speak to your vet or contact Nestlé PURINA®

PURINA® Your Pet, Our Passion.®