



# Managing Patients with Kidney Disease


**CANINE** Kidney Disease

**Stage I Kidney Disease**

- Early stage of kidney dysfunction when two-thirds of functional nephrons have been lost
- No signs of kidney disease apart from polyuria and polydipsia (PU/UD and proteinuria)

Feed **Prescription Diet® g/d® Canine pet food** or **Prescription Diet® k/d® Canine pet food**


- In hyperlipidemic or obese-prone patients, feed **Prescription Diet® g/d® Canine pet food**



**Stage II or III Kidney Disease**

- More than 75% of functional nephrons have been lost
- Characterized by azotemia and possibly other signs such as PU/UD, lethargy, inappetence, vomiting and weight loss as disease progresses


Feed **Prescription Diet® k/d® Canine pet food**



**Stage IV Kidney Disease**

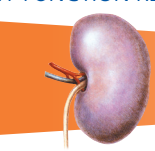





- More than 90% of nephrons have been lost
- Excessive retention of protein waste products
- Uremic syndrome signs (vomiting, diarrhea, oral ulcerations, depression) occur as disease advances

Feed **Prescription Diet® k/d® Canine pet food** or **Prescription Diet® u/d® Canine pet food**



## The four stages of kidney disease

Diagnosing kidney disease using the IRIS (International Renal Interest Society) Chronic Kidney Disease (CKD) Staging System

| KIDNEY FUNCTION REMAINING   |   |   |   |  |
|---|---|---|---|--|
|   |  |  |  |  |
|   | Stage I: ≤ 100%   | Stage II: ≤ 33%   | Stage III: ≤ 25%  | Stage IV: < 10%  |
| <b>AZOTEMIA</b>   | None  | Mild renal  | Moderate renal  | Severe renal   |
| <b>PLASMA CREATININE (mg/dl)*</b>   |   |   |   |  |
|  | < 1.4   | 1.4–2.0   | 2.1–5.0   | ≥ 5.0  |
|  | < 1.6   | 1.6–2.8   | 2.9–5.0   | ≥ 5.0  |
| <b>EFFECTS</b>  | Hyperphosphatemia unlikely<br>Hypertension possible<br>Proteinuria possible         | Hyperphosphatemia possible<br>Hypertension possible<br>Proteinuria possible         | Hyperphosphatemia probable<br>Hypertension possible<br>Proteinuria possible         | Hyperphosphatemia probable<br>Hypertension possible<br>Proteinuria possible          |

\*Levels apply to average size dogs and cats  
Measured when patient is well-hydrated

For more information visit [iris-kidney.com](http://iris-kidney.com)



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