

Cat Tips

How to Help Prevent Feline Kidney Disease

While it's no guarantee your pet won't get sick, these two things may help keep her from developing a disease that plagues more than half of kitties 10 years and older. If your cat already has chronic kidney disease, here's the best way to treat it, regardless of what your vet may advise.

Analysis by <u>Dr. Karen Shaw Becker</u>

STORY AT-A-GLANCE

- Over half of cats 10 years and older have chronic kidney disease (CKD); one common and preventable trigger for this epidemic is ultraprocessed dry food diets
- Feline CKD may also be linked to repeated doses of FVRCP vaccine, which is why it's so important to take a minimalist approach when vaccinating your indoor cat
- It's also important to understand that protein is not the enemy of cat kidneys, and that low-protein diets are not species-appropriate for felines
- The prescription "renal diets" recommended by many veterinarians are dry ultraprocessed formulas that provide very little moisture and poor quality protein to CKD patients whose greatest need is food brimming with moisture and animal protein
- Ideally, CKD cats should be fed excellent quality, fresh food diets formulated specifically to address renal disease; there are also natural supplements that can be very beneficial

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Estimates are that over half of feline family members 10 years and older are dealing with chronic kidney disease (CKD), also referred to as chronic renal disease/insufficiency or chronic renal failure. There are many causes of CKD in cats, but in my experience, one of the most common and preventable influences is a dry food diet.

Cats are designed by nature to meet most or all of their body's hydration requirements through their diet, not at the water bowl, which is why they don't have the thirst drive of other species. Ultraprocessed kibble — the furthest thing from optimal feline-specific nutrition — provides a very small percentage of the moisture cats need in their daily diet.

Kitties fed an exclusively dry diet suffer chronic mild dehydration that causes significant stress to the kidneys over time. As Dr. Lisa Pierson, a feline-only practitioner and cat nutrition expert, writes at her informative **CatInfo.org** website:

"It is troubling to think about the role that chronic dehydration may play in causing or exacerbating feline kidney disease."

In addition, the quality of high heat-processed protein in dry pet food is very poor. It's rendered, feed grade protein, which is harder for cats to digest and process.¹ Fed twice a day (or all day) every day for years, it can cause stress to the liver and kidneys.

CKD May Also Be Linked to Certain Vaccines

When I interviewed Dr. Lisa a few years ago, I asked her for her thoughts on what's behind the epidemic of feline CKD.

"That's a fabulous question I wish I had the answer to," she replied. "We do know that a well-respected researcher, Dr. Michael Lappin at Colorado State University, has established a possible link between feline kidney disease and the feline viral rhinotracheitis, calicivirus and panleukopenia (FVRCP) vaccine, which is grown in feline kidney cell cultures.

We really want to be very careful not to over-vaccinate cats, because it can possibly set up an autoimmune type of reaction to their own kidney cells. Having said that, my own cats still developed kidney disease.

I assure you they were not over-vaccinated. They got vaccinated as kittens. They passed away between 18 and 20 years of age. They were never vaccinated again after their kitten shots, yet they still got kidney disease. They were not on dry food. They were on a water-rich diet. So the short answer to your question is, 'I don't know, but I wish I did'."

An important point to make here is that as Dr. Lisa's situation demonstrates, we can do everything right and our cats may still acquire a debilitating disease, including kidney disease. Many parents of sick cats say, "I don't know what I've done wrong." Often, they've done nothing wrong. Even in optimal environments, cats can and do get sick.

Why Dietary Protein Is Not the Issue

Per Dr. Lisa in our interview:

"With regard to how protein affects the kidneys, it's important to understand protein is not the enemy of the cat kidney. Protein doesn't cause kidney disease. It doesn't exacerbate kidney disease. It is not the enemy of the kidney.

If there's one take-home message I want to get across, it's 'Please stop vilifying protein!' I would not feed any of the protein-restricted, so-called "prescription" diets to any cat in my care. There are always better options."

Once a cat is diagnosed with chronic kidney disease, often veterinarians recommend a prescription "renal diet," many of which are dry diets (e.g., Hill's k/d). This has never made sense to me. These formulas don't meet the dietary hydration requirements of cats, especially kitties who are losing large amounts of water due to worn out kidneys.

"I must say that I find it truly amazing when I hear about the very large numbers of cats receiving subcutaneous fluids while being maintained on a diet of dry food," Dr. Lisa writes at CatInfo.org. "This is an extremely illogical and unhealthy practice and every attempt should be made to get these cats on a diet that contains a higher moisture content."

Prescription renal diets also typically have reduced levels of protein, which is not ideal for cats, who are obligate (strict) carnivores requiring high levels of high quality animal protein for optimal health. According to Pierson:

"Renal diets restrict protein to the point that many cats — those that are not consuming enough of the diet to provide their daily protein calorie needs — will catabolize (use for fuel) their own muscle mass which results in muscle wasting and weight loss.

This internal breakdown of the cat's own muscle mass will cause an increase in creatinine (and BUN) which needs to be cleared by the kidneys. The rise in creatinine and BUN, and muscle wasting, can lead to an often-erroneous conclusion that the patient's CKD is worsening."

Another important consideration is that contrary to what many people continue to believe, studies show aging pets, including those with kidney disease, need more protein, not less.² But again, it must be very high-quality (human grade) protein.

Cats fed a low quality ultraprocessed diet all their lives often grow addicted to it and refuse to eat anything else. If your CKD cat is hooked on a poor-quality food that is difficult to digest and process, then it may indeed be necessary to reduce the amount of poor quality protein in the diet. A better idea is to slowly wean cats off highly refined dry food and onto fresher, moisture-rich diets.

However, if your cat is eating human grade (preferably antibiotic- and hormone-free) protein, then protein restriction prior to late-stage CKD is often counterproductive and can actually exacerbate weight loss and muscle wasting — two common health issues for cats with failing kidneys.

Ideally, if your cat is eating poor-quality food, the goal is to wean him off it and onto a better quality diet so that adequate protein intake can be continued. I recommend a human grade, fresh food diet formulated for kidney disease, either homemade or a prepared diet like **Darwin's Intelligent Design**.

Darwin's has created the only veterinary formulated therapeutic fresh food diet specifically formulated for cats with CKD. It can be fed lightly cooked or raw. Unless your cat absolutely refuses to eat anything else, I don't recommend feeding prescription dry "kidney diets".

A Word About Phosphorus Content

Phosphorus is an important mineral that plays a significant role in feline health. One of the jobs of the kidneys is to balance phosphorus levels in the body by removing the excess. In cats with renal disease this ability is compromised, and in fact, many CKD kitties ultimately develop hyperphosphatemia (abnormally high levels of phosphorus in the bloodstream). The goal is to keep phosphorus levels from climbing.

Processed renal diets are formulated with reduced phosphorus levels; however, there are ways to accomplish this with a much healthier, high quality, fresh food diet. For example, the Darwin's CKD diet contains the natural phosphorus binder chitosan, plus increased calcium to minimize absorption of phosphorus. Optimizing vitamin D levels in renal disease patients can be beneficial, as well.

Additional Recommendations

Specific vitamins can sometimes be beneficial for cats with chronic kidney disease. I often add B-vitamins to a cat's sub-Q fluids (if required), or to their food, as a supplement. B-vitamins can help prevent anemia, relieve nausea, and improve a cat's overall feeling of well-being.

L-carnitine and additional amino acids (such as RenAvast®) can help slow muscle wasting. Omega 3 fatty acids (DHA/EPA) may also help slow the progression of renal disease by reducing chronic inflammation. Adding a source of blood-building supergreens, such as chlorophyll or chlorella, can help fight a low red cell count. I also recommend adding detoxification support, such as dandelion and SOD (superoxide dismutase), if your kitty will consume it.

Probiotics that contain specific kidney supportive strains such as Lactobacillus acidophilus, casei, and plantarum, Streptococcus thermophilus, and Bifobacterium longum can also be extremely beneficial. These strains, which support healthy urea metabolism, are available in "kidney-specific" products, as well as OTC probiotics, so read labels carefully.

Feline Renal Support by Standard Process can also be very helpful, as well as phosphorus binders (chitosan) and sodium bicarbonate, if appropriate. An integrative veterinarian can help you decide if these are indicated based on your cat's specific situation.

Making your kitty's environment as stress-free as possible is also extremely important. And most important of all in the prevention or management of kidney disease is vigilant monitoring of organ systems. The goal should be to identify risks and subtle changes long before kidney failure occurs.

Completing an annual urinalysis and bloodwork (including SDMA testing) allows you identify early changes in kidney function and begin supportive care months to years before your cat shows outward signs of kidney disease. Many cats live long full lives when kidney disease is identified early and managed proactively.

Sources and References

¹ Hamper, B.A. et al. Apparent nutrient digestibility of two raw diets in domestic kittens. J Feline Med Surg, 2016 Dec;18(12):991-996

² Finko DR, et al. Protein and calorie effects on progression of induced chronic renal failure in cats, Mousabilities.com