



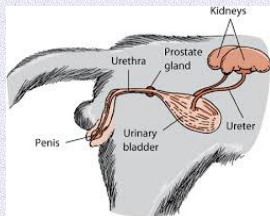
## Mountainview Animal Hospital

WINTER NEWSLETTER



### The Bottom Line

The kidneys are bean shaped organs that are located in the abdomen below the liver towards the back. There are two kidneys and they filter the blood and produce urine. They have tubes called ureters that transport the urine from the kidneys to the bladder.



The kidneys have a higher blood flow than even the brain, heart or liver.

### CHRONIC KIDNEY DISEASE

Last March I had to euthanise Findling. Findling (meaning little found one) was the first cat I had ever had. She was brought in to me at 10:00 pm on a Sunday night by a client who saw her two older cats "playing" with her. I had just graduated from veterinary school less than a month ago and my first glance at her was terrifying. I had never seen anything so small. She was smaller than the palm of my hand, just a newborn. Her mother had probably been scared off by the client's two cats, orphaning this tiny creature. Findling quickly became the love of my life. She was a small cat but strong, feisty and very affectionate, but only to me. She would attack almost anyone else who came near us. While I should have been ashamed of that behaviour, I was secretly proud of how this little cat protected her mommy.

She lived a very healthy life until the age of fifteen. At that time she had developed cancer in her eye. Since she was still very strong for her age, I decided to act aggressively against her cancer, her diseased eye was removed and she went through a course of chemotherapy. Findling and I were so lucky that her cancer never returned.

I had always been vigilant about her health, checking her blood and urine for illness at least yearly. But since her cancer, I increased how often I tested her. At seventeen, her blood tests began to show changes to her kidneys. Initially the changes were very mild and over the years her condition slowly worsened. As the kidney disease progressed so did my management of it. Eventually at the age of twenty, her kidneys failed and I had to deal with the most incredible pain of saying goodbye. When I look back at the later years of her life, I am so grateful that I caught both her cancer and her kidney disease early or else I would have lost so many wonderful years with her.

Most people think of the kidneys as the organs that produce urine but the kidneys are capable of much more than that. They help to regulate electrolytes, maintain the acid-base balance, influence blood pressure, maintain the body's water, glucose and protein balance, excrete waste toxins and produce hormones. It is no wonder then, that when the kidneys fail to do their jobs, the whole body's function is affected. Incredibly, the kidneys have a huge surplus capacity and more than 70% of the kidneys have to be damaged before we can measure their dysfunction. This means that by the time we are aware that there is a problem, a whole lot of damage has already occurred. It is for this reason, that diagnosing kidney disease as early as possible is so important.

Chronic kidney disease is a progressive loss in kidney function over a period of months or years.

Chronic kidney disease is the most common cause of illness in older cats. While dogs can get kidney disease too, it is much less common. Initially, most people equate the symptoms of chronic kidney disease with signs of aging. Their cat has become less active, the coat less shiny and the body less fit looking. Some people will notice that their cat is drinking more and urinating more, and many cat owners think this is a good thing. Eventually, these cats start to look quite thin, they may eat less and vomit a bit more often. Because one of the kidneys' function is to regulate body water, cats with kidney disease become progressively more dehydrated. Over time, the body's blood

## The Bottom Line

Some breeds, such as Persians are predisposed to a hereditary kidney problem called Polycystic Kidney Disease. This breed should be blood tested for kidney disease earlier in life than other cat breeds.

Have your senior pet checked by your veterinarian every six months. A lot of changes can occur over a short period time in your pet's older body.

The kidneys also produce a hormone called erythropoietin that tells the body when to make more red blood cells. Because cats with kidney disease produce less of this hormone, they are often a little anaemic

pressure rises. This rise in blood pressure can even result in blindness. The kidneys are responsible for producing a hormone that stimulates the bone marrow to produce blood cells and without that hormone, cats can become anemic. Cats with kidney disease will also develop bad breath and eventually ulcers develop in the stomach and mouth. Cats that are brought to their veterinarian in this state have a long and difficult road ahead and many do not make it. Fortunately, when diagnosed early, cats can live very comfortable lives for many years.

Ideally, we would like to diagnose chronic renal disease before our cats have even begun to show any symptoms of disease or are showing only the early signs of drinking more and urinating more. A thorough physical examination, blood test and urine test can evaluate how well the kidneys are functioning. Once we have diagnosed kidney disease, we will often stage the disease. Staging is a classification system established by the International Renal Interest Society to aid in the assessment of Chronic Kidney Disease. There are four stages and two substages. The stages are based on the level of creatinine in the blood. Creatinine is a byproduct of muscle (meat) digestion and processing (metabolism) and is supposed to be excreted by the kidneys in the urine. The substages are based on the blood pressure and urine protein levels. Staging kidney disease allows us to estimate the progression, determine if there are any further tests to run and what treatment options we should consider.

The treatment of kidney disease is very individual. Please do not be intimidated by the list, only in rare cases do cats require all of these.

**Dietary therapy:** In the early stages, the treatment is often as simple as feeding a special kidney diet. Kidney diets are designed to produce less waste after metabolism thereby reducing the amount of toxins that build up in the blood. They are lower in phosphorous which tends to build up in cats with kidney disease and the diet is higher in potassium which is often lost in cats with kidney disease. It is also advisable to feed more canned food to cats with kidney disease. These cats are often a bit dehydrated and canned food increases their overall daily water intake. There are many different kinds of kidney diets available through your veterinarian, so if your cat doesn't like one flavour, try another one.

**Control infections:** As we age, our bodies are more susceptible to infections. This is equally true for our pets. Bladder and kidney infections should be treated if they are present. Dental disease is also a common source of infection in our older pets.

**Control of dehydration:** The kidneys are responsible for the regulation of the water content of the body. When the kidneys become insufficient in their function they allow more water to be urinated out. As a result, the affected cats drink more. In the early stages of the disease giving older cats lots of easy access to water helps, as does feeding more canned food. Even adding more water to the canned food is a good idea. As the disease progresses, these cats cannot possibly drink enough water to keep up. In this case we will often teach pet owners how to give fluid injections at home. Don't worry, in most cases this is much easier than it sounds.

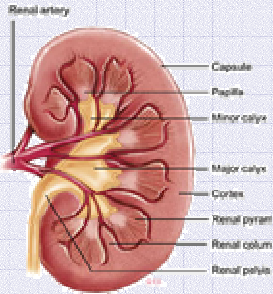
**Supplements:** Although kidney diets are already adjusted for the changes that kidney disease causes, some cats require medication as well. Cats in renal failure tend to lose too much potassium in the urine. This leads to muscle weakness, stiffness and poor hair quality. Low potassium levels may also contribute to the worsening of the kidney failure. Potassium supplements are available in flavoured liquid, chews or tablets. Phosphate binders help to reduce the accumulation of excessive levels in the blood. Omega fatty acids also help improve kidney function.

**Control of hypertension:** The kidneys help to maintain normal blood pressure. When the kidneys are diseased, the blood pressure can rise. High blood pressure can cause sudden blindness in some cats. Blood pressure can be measured in cats and can be controlled with medication.

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## The Bottom Line

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The anatomy of the kidney

**Control urinary protein loss:** As the kidney disease progresses, protein can leak out through the kidneys. These cats become very thin and weak. This protein can be measured in the urine. Medication can be given to prevent urine protein loss.

**Control of nausea:** In more advanced cases of kidney disease cats can become nauseous. This is usually evident by a decrease in the cats appetite and occasional vomiting. Medication can be given to control the nausea and keep our cats eating well.

**Control of oral and gastric ulcers:** Cats with oral and stomach ulcers usually have very bad breath and stop eating. The ulcers develop because of the build up of toxins in the blood. There are medications that can be given to avoid the development of these ulcers.

There is a lot we can do to help pets age well, provided we know what is happening in their bodies. More frequent check ups and simple blood and urine tests will help us keep ahead of the aging process. By performing a geriatric wellness screen we can detect kidney, liver, thyroid and hormonal diseases before your pet even begins to show symptoms of illness. How easy is that!

We strongly encourage everyone with cats 10 years of age and older, or dogs 8 years and older to discuss "wellness testing" with us. We will give your pet a thorough physical examination, discuss your concerns, and perform a wellness test on a small sample of blood and urine. Of course, we always hope the test results are normal. In the event that they are not, we now have the necessary information to bring our pets back to a healthy state.

## ATTENTION VALUED CLIENT

This will be the last newsletter to be **MAILED** to you

The next newsletter will be sent via **EMAIL**

We would love to stay in contact with you, so please call us with your email address.

You wouldn't want to miss out on any 'Time with Tux', would you?

Of course, you could always read past and present newsletters on our website at

[www.mountainviewanimalhospital.ca](http://www.mountainviewanimalhospital.ca)

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**The Bottom  
Line**

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We are in the process of transferring to computerized medical records from paper. Wow, much more difficult process than we thought. Dr. Ewing is seriously questioning what was ever wrong with pencils and erasers. We ask for your patience while we figure this out.

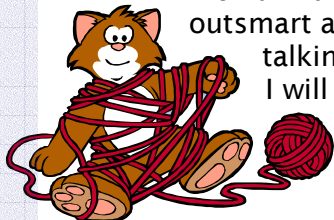
Norwegian scientists have hypothesized that Rudolph's red nose is probably the result of a parasitic infection of his respiratory system.

In Germany, *Heiligabend*, or Christmas Eve, is said to be a magical time when the pure in heart can hear animals talking.



## TIME WITH TUX

So get this, there is a huge holiday coming up when humans get to decorate their dwellings, eat a ton of food and take some time off. Its true, I heard my staff or servants as I like to think of them, talking about it. They have been discussing decorating the hospital. Dr. Ewing is concerned about decorating the back just in case I chew something, wreck it or hurt myself. She is fooling herself if she thinks I won't find a way to chew her decor. Does Dr. Ewing really think she can outsmart a cat! We are a sneaky species you know. I also overheard them talking about presents and food treats. They had better include me or I will pee on their stuff, revenge will be sweet.



(Tux of course we will include you)



## HOLIDAY HOURS



Dec. 24 <sup>th</sup> - Christmas Eve:	Open 9:00 - 12:00
Dec. 25 <sup>th</sup> - Christmas Day:	Closed
Dec. 26 <sup>th</sup> - Friday:	Closed
Dec. 27 <sup>th</sup> - Saturday:	Reception only
Dec. 31 <sup>st</sup> - New Years Eve:	Open 9:00 - 12:00
Jan 1 <sup>st</sup> - New Years Day:	Closed

Unless otherwise specified here, Mountainview Animal Hospital will be open during its regular office hours. Animals in the hospital over the holidays will receive the same great care and attention as always. For those patients requiring emergency care over Christmas and New Years, The Emergency Veterinary Clinic on Hwy 10 will be open to serve your pet's medical and surgical needs. You can call ahead at 905-495-9907 or go directly there. The Emergency Veterinary Clinic is located on the south east corner of highway 10 and Wexford Rd, just one block north of Bovaird (Highway 7).

From all of us at Mountainview Animal Hospital,  
we wish all of you

**A Very Merry Christmas, A Joyous  
Holiday Season and A Happy New Year!**