CHRONIC KIDNEY DISEASE IN THE CAT

"Chronic Kidney Failure" is the term given to the condition wherein the kidneys begin to fail to remove the body's waste products from the blood. Kidney failure does not necessarily mean urine excretion ceases. Kidney failure takes two clinical forms:

1. Urine production is continued, but does not contain the filtered waste products. Often urine production is actually increased.
2. Urine production is decreased or is totally absent.

Kidney failure may occur from exposure to various chemicals or infectious agents, but the **primary cause of CHRONIC kidney failure is the process of aging**. The kidneys just wear out! For most cats, the early signs of impending kidney failure occur at 10-14 years of age.

Early signs of chronic kidney failure include increased water consumption and increased urine production. When aging decreases the ability of the kidneys to filter the blood efficiently and effectively, the cat's body responds by increasing blood flow to the kidneys. More blood flow means more potential exposure of the blood to the kidneys for filtration. This results in the production of more urine, but not necessarily filled with any more waste products. Thirst usually increases as the body's way of replacing the additional urine being drained from the body. As the kidneys become more ineffective at removing the waste products from the body, clinical signs of decreased appetite, vomiting, diarrhea, and bad breath become evident. In the late stages, mouth ulcers are commonly present.

DIAGNOSIS OF CHRONIC KIDNEY FAILURE is accomplished by several tests. The first evidence of chronic kidney failure will be changes in the composition of the urine. Chemical analysis, measurement of specific gravity, and urine sediment examination are important in the evaluation of the urine. As the disease progresses, blood tests to measure the blood urea nitrogen (BUN) and blood creatinine become important diagnostic tools.

SUCCESSFUL TREATMENT REQUIRES EARLY DETECTION. The earlier signs of kidney failure are noted, the better chance for prolonging the cat's quality life. The best treatment would be a kidney transplant! However, since that is not yet practical, treatment is directed at helping the kidneys "catch up" with its function of filtering the blood for the body. This is accomplished through the administration of large quantities of intravenous fluids to "flush out" the blood, by running a lot more fluid through the kidney filtration system.

The body can still function adequately with only 10% active functioning kidney tissue. If the kidneys can be helped to "catch up," hopefully they can then maintain adequate filtration with the help of medications. This initial treatment may result in long-term kidney function, short-term functioning before problems return again, or no improvement at all. Unfortunately, there is no test to determine which cat will or will not respond to treatment.

If initial treatment is successful, recommendations will be made to keep the kidneys functioning as long as possible. The recommendations may include:

1. High quality, low protein diets.
2. Potassium supplementation.
3. Phosphate binders.
4. Additional oral or parental fluids.
5. Drugs to stimulate bone marrow production.

Aggressive treatment can add up to 3-4 years to the life of a cat.