

SPECIAL NEEDS OF GERIATRIC CATS

The aging cat goes through a number of changes which result in the ultimate failure of various body organs and systems. Recent research has identified a problem related to potassium balance which is common in many older cats. Fortunately, the problem is treatable. As a result, many elderly cats are now living longer and healthier lives.

What is potassium, and why is it especially important in older cats?

Potassium is found in the cat's blood and within all the cells of the body. It is essential for many functions of cells. Potassium is probably most important for the cells which make up skeletal and cardiac muscle. Severe muscle weakness can result when the body becomes depleted of potassium.

Recently, two important discoveries have been made about potassium and older cats. A mild form of hypokalemia (low blood potassium) has been identified in the older cat and is associated with lethargy and inactivity, a poor appetite and haircoat, and the development of a mild anemia. Heretofore, we have considered these to be part of the aging process. Now we know that this process can be reversed with supplementation of potassium. Unfortunately, we do not have a test to conclusively identify these cats because the blood test for potassium is a poor reflection of the body's total store of potassium. Blood potassium may be normal in cats who are actually depleted of potassium. For these cats, a 30 to 45 day trial of potassium is necessary. If response occurs and potassium supplementation is continued, the cat will continue to feel, act, and eat better and will live longer.

The second discovery about low blood potassium is related to the effect of potassium on the kidneys. The kidneys are the organs that usually wear out first in the older cat. As the kidneys become less efficient in removing waste products from the blood, the cat produces more urine in an attempt to remove toxins from the body (via the kidneys). Increased thirst and water consumption will result. This is a natural body process that is similar to dialysis performed on people with poor kidney function. An undesired consequence of increased urination is the loss of potassium from the body in the urine. As urine production increases, more and more potassium is lost, eventually leading to hypokalemia. The potassium wasting associated with increased urine production has a negative effect on the kidneys. Research has demonstrated that low potassium is harmful to kidney function. This results in a vicious cycle: declining kidney function results in increased loss of potassium, and the loss of potassium then speeds up the deterioration of the kidneys.

How can my cat benefit by this information?

These important discoveries now allow us to interrupt this vicious cycle by supplementing the cat with potassium. By so doing, kidney function is supported and prolonged, and the cat acts, feels, and eats better at the same time.

How do I give potassium to my cat?

Potassium is available in three forms: 1) a tablet, 2) a powder that can be mixed with canned food, and 3) a tasty gel. All are readily available through veterinarians. Potassium is also sold for human use as a grape-flavored liquid. However, very few cats are fond of the taste of this product.



If your cat eats canned food, you should try the powder first. It can be mixed in canned food and will be eaten by most cats. If your cat does not eat canned food and is cooperative about taking pills, you should try the tablets. If these are not successful, the tasty gel is a good approach. Many, but certainly not all, cats will take this readily.

Are there early signs of aging and disease for which I should be watching?

Geriatric cats are in the stage of life in which the aging process is affecting every organ. Some organs wear out faster than others, so certain observations are especially important to make. The following is a list of key recommendations that we feel are important for older cats.

- 1. Keep vaccinations current
- 2. Feed a non-acidified diet, which usually means a low-protein diet.
- 3. Brush frequently to keep hair coat from matting.
- 4. Clip toe nails as needed to prevent overgrowth.
- 5. Keep plenty of fresh water available and monitor its consumption.
- 6. Monitor urine output by measuring wet litter.
- 7. Keep other pets from preventing this one from free access to food and water.
- 8. Keep indoors all the time if possible but at least at night.
- 9. Weigh your cat on the same scale and record results at least every 60 days.
- 10. Present your cat for an examination for any of the following:
- a) Sustained, significant increase in water consumption.

(Abnormal is intake greater than 100 ml/kg/day or approximately 1.5 cups (8 oz cups)/day or 12 oz total for 9 pound cat.)

- b) Sustained, significant increase in urination or amount of wet litter.
- c) Weight loss.
- d) Significant decrease in appetite or failure to eat for more than two consecutive days.
- e) Significant increase in appetite.
- f) Repeated vomiting.
- g) Diarrhea that lasts over 3 days.
- h) Difficulty in passing stool or urine or prolonged sitting or laying in the litter box.
- i) Change in litter box habits, especially if urination or defecation occurs out of the litter box.
- j) Lameness that lasts more than 5 days, or lameness in more than one leg.
- k) Noticeable decrease in vision, especially if sudden in onset or pupils that do not constrict in bright light.
- 1) Masses, ulcerations (open sores), or multiple scabs on the skin that persist more than 1 week.
- m) Foul mouth odor or drooling that lasts over 2 days.
- n) Increasing size of the abdomen.
- o) Increasing inactivity or amount of time spent sleeping.
- p) Hair loss, especially if accompanied by scratching or if in specific areas (as opposed to generalized).
- q) Breathing heavily or rapid at rest.
- r) Inability to chew or eat dry food.