

Senior Care Guidelines - Summary

Cats are the most popular pet in the US and much of northern Europe. Although 78% of owners consider their cats to be family members, many cats, particularly seniors, do not receive appropriate preventive care. With good care, many cats live into their late teens, some into their twenties; the percentage of older cats is increasing.

The goals of the AAFP Senior Care Guidelines are to assist veterinarians to deliver consistent high-quality care to senior cats, promote longevity and improve quality of life of senior cats.

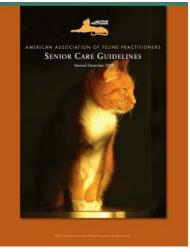
The Senior Cat Wellness Visit

- Older cats can be classified as "mature or middle aged" (7-10 years), "senior" (11-14 years), and "geriatric" (15+ years). In this document, as elsewhere, the word "senior" is used as a broad category for all older cats, unless otherwise noted.
- Using open ended questions, a comprehensive medical and behavioral history raises the index of suspicion for early disease. The frequency of behavior problems increases with age.
- A thorough physical examination allows for detection of problems that
 may not be obvious to owners or uncovered with laboratory testing. Make weight and body condition
 score (BCS) comparisons at each visit.
- Examine apparently healthy senior cats every 6 months; more frequent evaluations may be needed once evidence of an age related disease process is discovered.
- Perform the minimum data base (MDB, Table 1) at least annually starting at age 7-10, with the frequency increasing as cats age.
- Trends in the MDB can be significant, allowing for detection of disease earlier than interpretation of a single sample.

Table 1: Minimum Data Base	"MATURE" CATS (7-10 yr)	"SENIOR / GERIATRIC" CATS (> 10yr)
CBC (hematocrit, RBC, WBC, diff, cytology, platelets)	+	+
CHEM Screen		
At a minimum, include:		
TP, albumin, globulin, ALP, ALT, glucose, BUN, Creatinine, K+,		
Phos, Na+, Ca		
	+	+
UA (sp gr, sediment, glu, ketones, bili, protein)	+	+
T4	+/-	+
BP	+/-	+

Interpretation of the Urinalysis

- Interpretation of the UA, particularly the specific gravity and protein, is of particular importance in senior cats.
- Dipstick protein measurement is inaccurate; the Microalbuminuria (MA) test or Urine Protein-Creatinine (UPC) ratio may be indicated. Assess proteinuria in the absence of urinary tract infection or gross hematuria.
- If the urine specific gravity measurement is <1.035, repeat the measurement on a subsequent sample to evaluate persistence.





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Bacterial infection can be present in the absence of an inflammatory sediment, particularly with CKD, diabetes mellitus, and hyperthyroidism. Perform a urine culture and sensitivity when these conditions are present or any time the urine specific gravity is sufficiently dilute to potentially cause misinterpretation of the urine sediment.

Blood Pressure Monitoring and Hypertension

- BP should be measured at least annually in cats in the "senior" and "geriatric" age groups. Some recommend routine BP monitoring in mature cats as well, providing baseline measurements for future comparison.
- Most cats have an identifiable cause for their elevated BP, but idiopathic increases in BP may occur in a substantial subpopulation of older cats.
- Obtaining an accurate BP requires a consistent approach with attention to detail. Measure blood pressure with the owner present in a quiet room. Allowing the cat to acclimate to the room for 5-10 minutes can decrease anxiety-associated hypertension up to 20mg Hg.



Nutrition and Body Condition

- Diet recommendations must be individualized and will vary depending on the body condition score (BCS).
- Feeding small meals frequently increases digestive availability. Increase water intake by offering canned food and multiple water dishes.



- Deficiencies in the essential B-vitamins can occur with poor intake or intestinal disease. Measure serum cobalamin (B₁₂) concentration in any cat with weight loss, diarrhea or poor appetite that may have GI disease.
- Obesity is a metabolic disease with hormonal, metabolic and inflammatory changes; it is a risk factor for diabetes, osteoarthritis (OA), respiratory distress, lower urinary tract diseases and early mortality.
- Cats in the "senior" and "geriatric" age groups often become underweight with low BCS scores. Identify and correct the underlying health problem when possible.

Dental Care

• Oral cavity disease is an often overlooked cause of morbidity in the older cat and can contribute to a general decline in attitude and overall health. Age should not exclude the treatment of dental disease.

Anesthesia

- Older cats require particularly attentive care and monitoring to prevent hypoxia, hypotension, and hypothermia. Provide intravenous fluids and thermal support; monitor blood pressure and body temperature.
- Attend to comfort and gentle handling, particularly in cats with OA or muscle wasting.

Monitoring and Managing Disease

Chronic Kidney Disease (CKD)

- Stage and manage CKD patients using the International Renal Interest Society (IRIS) guidelines. The IRIS Stage is assigned using the serum creatinine concentration, UPC ratio, and BP.
- Monitor BP since CKD is the leading cause of secondary hypertension.
- Evaluate for proteinuria; a raised UPC (> 0.4) warrants consideration of treatment.
- Feeding a "renal" prescription diet has been shown to reduce uremic episodes, decrease phosphorus retention, prevent muscle wasting, and increase survival times.





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Hyperthyroidism

- The total T4 is the appropriate screening test. However, the total T4 may be equivocal or normal if concurrent illness.
- Since the free T4 can be elevated in cats with non-thyroidal illness, interpret free T4 in conjunction with total T4 and clinical signs in cats with normal total T4 and suspicion of hyperthyroidism.
- Monitor affected cats for kidney disease and hypertension.
 - o Hypertension may persist or develop after treatment.
 - Even cats with a urine specific gravity >1.035 are at risk for developing unmasked kidney disease following treatment.

Diabetes Mellitus

- Although most cats are insulin dependent at the time of diagnosis, early glycemic control may lead to clinical remission.
- Of particular importance for senior cats is the effect of concurrent disease, such as chronic pancreatitis, on their health status.

Inflammatory Bowel Disease (IBD) and Associated Disease

- Rule out a disorder causing digestion/absorption problems in euthyroid, non-diabetic cats with unexplained weight loss, vomiting, diarrhea, increased appetite and thirst.
- Evaluation should include measurement of feline pancreatic lipase immunoreactivity (fPLI), feline trypsin-like immunoreactivity (fTLI), cobalamin (B₁₂), and folate concentration.
- IBD, pancreatitis, and cholangiohepatitis may occur separately or together.

Cancer

- Weight loss, in the absence of other identifiable causes, is a common sign of cancer.
- Pursuing a diagnosis before body condition deteriorates may affect outcome.
- Critical components of cancer therapy include pain management, anti-nausea medication, and nutritional support.

Osteoarthritis

- Osteoarthritis (OA) is a common but under-recognized condition in senior cats. Signs are often subtle behavioral and lifestyle changes mistaken for 'old age.'
- Management is ideally holistic in scope, attending to both the cat and its environment.

Cognitive Disorders

- Cognitive changes may result from systemic illness, organic brain disease, true behavioral problems, or cognitive dysfunction syndrome (CDS), a neurodegenerative disorder
- Rule out all medical illnesses to diagnose a primary cognitive disorder.

Complex Disease Management

- Since the likelihood of developing more than one disease increases with age; search for additional disease processes when expected therapeutic results are not obtained.
- Be aware of issues surrounding multiple diseases in senior cats:
 - O Diagnosing one disease while missing another, or assuming a single disease is severe when signs are actually due to multiple diseases (e.g., hyperthyroidism and concurrent CKD).
 - Treatment of some diseases may affect other, concurrent diseases. (e.g hyperthyroidism and diabetes mellitus)





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Quality of Life



- Hand in hand with the management of chronic illness in senior patients comes the
 responsibility to control pain and distress, assess quality of life, and provide guidance
 to the owner in end-of-life decisions.
- The veterinarian must act as a patient advocate when counseling clients about decisions regarding use and/or continuation of treatment.
- Hospice care patients and their owners benefit from examination every 2-4 weeks, or as deemed necessary to assess comfort, quality of life, and quality of the relationship.
- Quality-of-life scales can aid tremendously in end of life decision making.

The full copy of the senior care guidelines can be found at http://www.catvets.com/professionals/guidelines/publications/?Id=398 and in the Journal of Feline Medicine and Surgery Clinical Practice, September 2009. They are in memory of the late Dr. James R. Richards, who coauthored the initial senior guidelines, 1998, and who loved to say "Cats are masters at hiding illness."

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