YOUR CAT'S GOLDEN YEARS

Congratulations on your success at caring for your cat for all these years!

Your pet is getting older, but the care you provide throughout its lifetime can minimize and prevent disease as he or she ages. Proper care includes periodic checkups, routine vaccinations, parasite control, dental examinations, regular exercise, and a good diet. The average indoor cat has a life expectancy of 15-18 years, and many live into their twenties nowadays.

As pets age, two types of changes occur: <u>age related changes</u> and <u>pathological changes</u>. Age related changes, such as vision and hearing loss, are normal, and develop in most animals. These changes cannot be prevented, but we can help you and your pet to adapt.

Many pathological changes or diseases can, on the other hand, be prevented or successfully treated. These include kidney, liver, gastrointestinal and thyroid conditions, arthritis and even cancer. With good care to promote health and prevent disease in senior pets, your pet can remain healthy and active well into its twilight years.

Old age is not a disease, it is a stage of life. None of us would be very happy with our physicians if we went to their offices complaining about an ache or pain, lump or bump and were told, "You are just getting old, so there's nothing we can do about that."

We can help you determine what foods, medications and procedures will improve the length and quality of your pet's life. Your help is needed to carry out any treatment recommended.

Length of Life Is Not Our Only Goal

Better vaccines, nutrition, and dental care have extended many pets' lives. Our challenge is

to maintain good quality of life for these extra years. It's not just about lifespan, it's about "healthspan" – the length of time we can keep your cat comfortable and happy.

Age-Related Sensory Changes

- Cataracts are uncommon in cats but some degree of visual impairment occurs with age.
- Hearing loss is usually gradual and may not be noticed by owners until the cat becomes completely deaf.
- Both visually and hearingimpaired cats can, and often do, function quite normally in their normal environment
- Hearing loss is not the same as senility, but caretakers may perceive it as such.
- Taste sensation is reduced in older cats and this can lead to poor appetite
- Impaired thermoregulation is another change that may occur in older cats. Provide a safe heat source for aging cats to use as needed.

The importance of pets in our lives and the quality of care sought by pet owners today are significant influences on life expectancy. Dogs and cats used to be kept outdoors; then they moved indoors but slept in a basket in the kitchen. Pet owners today want the same level of health care and nutrition that they themselves enjoy, and they count on veterinarians to help preserve the precious bond they have with their pets. They share a bond with us that was unheard of fifty years ago.



Now pets share our beds, our social media and our leisure time activities. Our feline friends have their own furniture, music and clothing. These lifestyle changes have led to life expectancies that are many years longer. House cats don't die young from infectious diseases, accidents and injuries. Instead, they suffer from an array of other diseases you need to be aware of.

Because of these societal changes, the growth of senior care products and services and the advances in senior medicine for pets has been astonishing.

We now screen over 75% of the older pets we see for early signs of common diseases because our clients understand the value of wellness testing and its connection to pet health. Catching problems early allows us to do more to preserve the length and quality of a pet's life.

The three D's are the keys to care for senior pets – Diagnostic Testing, Diet and Dental Care.

Diagnostic Testing

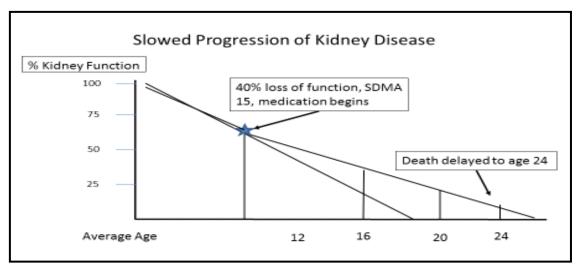
So what are we looking for with our diagnostic testing? Blood and urine tests pick up kidney, liver and hormonal diseases in their beginning stages, so we can intervene early and greatly extend life expectancy with proper therapy.

Chronic kidney disease, CKD, is the most common diagnosis we make based on blood testing. CKD is a leading killer of cats but when caught early, long before symptoms appear, we can treat it effectively and add many years to your cat's life expectancy.

Treatment can keep chronic kidney disease at bay for a long time, sometimes many years.

Do you know why you are asked to produce a urine specimen each time you visit your physician for a checkup? It is because a urinalysis is one of the least expensive but most valuable laboratory tests around. Kidney disease is one of the most common problems of pets over age ten. Bladder cancer, urinary tract infections, diabetes and liver disease can also be detected with a urine sample. In cats, protein loss into the urine is one of the earliest signs of kidney disease. Annual or semiannual urine testing is recommended for all senior cats, along with blood testing.

A blood test called SDMA is included with all of our senior wellness panels. SDMA is our first early warning of kidney disease. It takes years for the symptoms of slow kidney function decline to appear. If we start treating the disease when the SDMA first starts to become elevated, usually between the ages of nine and twelve, we slow the deterioration of the kidneys and delay the onset of symptoms, which can prolong the life expectancy of your cat by several years, as the chart below shows.



Hyperthyroidism is caused by a benign tumor of the thyroid gland, which produces too much thyroid hormone. This revs up metabolism, causing weight loss, along with heart damage, high blood pressure, behavior changes and gastrointestinal symptoms. Fatal if untreated, this disease is easily managed. If it is caught before severe damage is done

- •Stool sample testing should also be done each year. Most cat owners think that cats that don't go outside have low risk for intestinal parasites. This couldn't be farther from the truth.
- •Almost all cats harbor parasite larvae in their bodies their entire lives. As with viral infections, these can flare up and become a cause of disease as pets age.

your cat would be expected to have a normal life expectancy. We do thyroid testing annually for cats 10 and above.

Diabetes has become a very common disease in our feline patients, because it is associated with obesity. Because many more cats lead sedentary, indoor lifestyles nowadays, both obesity and diabetes rates have shot up over the past twenty years. As with humans, weight loss and improved diet can keep diabetes at bay in many cases. Some cats will need lifetime insulin injections. This is not as difficult as you may think, and new monitoring systems make blood sugar testing much easier.

Hypertension can lead to strokes and blindness in cats, just as it can in humans. Blood pressure monitoring is part of every senior cat exam here at Best Friends.

Cancer is a big concern for older cats and a worry for their caretakers. Happily, the most common types of cancer in felines are very treatable. To prevent cancer:

 Keep your cat at a healthy weight. Fat cells produce toxins that damage other cells, leading to cancer.

- Treat hairball vomiting seriously. Frequent hairball vomiting almost always indicates intestinal disease, which progresses slowly to cancer.
- Decrease toxin exposure. Common culprits include flea preventives and treatments containing Pyrethrin; PBDEs in canned cat foods containing fish.
- Omega three fatty acids (OM3s) protect cells from oxidative damage that leads to cancer. Supplementing fish oil from a young age reduces cancer risk.

Common tests and procedures

Diagnostic testing gets more sophisticated every year. Testing that used to be done only at veterinary schools or referral hospitals is now readily available.

For example, chest x-rays and electrocardiograms should be done for cats with heart murmurs, unexplained weight loss or signs of heart or lung disease. X-rays and ECGs can be done here at Best Friends and sent digitally to a radiologist or cardiologist for interpretation.

A heart murmur or abnormal heart rhythm on an electrocardiogram (ECG) prompts us to recommend an echocardiogram – an ultrasound of the heart. This can be done right here by a mobile specialist. On an "echo" we can actually watch the heart beating and determine whether the valves and the heart muscles are working properly. New medications have made heart disease more and more treatable in cats and dogs, and early diagnosis is the key to a good prognosis.

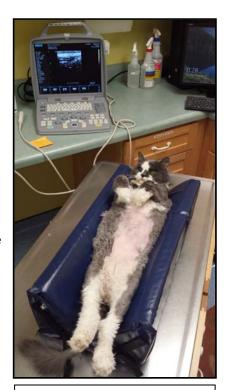
Another commonly recommended test is the abdominal ultrasound. Instead of looking at the heart and lungs, using an ultrasound probe over the abdomen lets us

look at the liver, pancreas, kidneys, bladder, intestines and other organs. Inflammatory bowel disease, or IBD, is common in senior cats. Also common is low-grade, small-cell gastrointestinal lymphoma. This form of cancer is easily and successfully treated with at-home oral chemotherapy.

Diet

The second most common disease of pets is... Obesity.

- Being overweight decreases life expectancy by two years.
- Keeping your cat at a healthy weight makes a huge difference to healthspan, reducing risk for cancer, arthritis and diabetes.
- We can help you to choose the diet that is best for your feline friend.



Dr. Boss's senior cat, Lucy, having an abdominal ultrasound. Lucy is living a happy life, while being treated for hyperthyroidism, IBD and severe arthritis. Her diabetes is controlled with a special diet.

- Overweight cats are three times more likely to have arthritis
- Obese cats are <u>five times</u> more likely to have arthritis

Around the age of sixteen, weight loss often becomes a bigger concern than weight gain. Energy requirements

do not decrease in older cats. In fact, many cats absorb food less efficiently as they age. They may actually need to eat more than they used to in order to maintain their body weight.

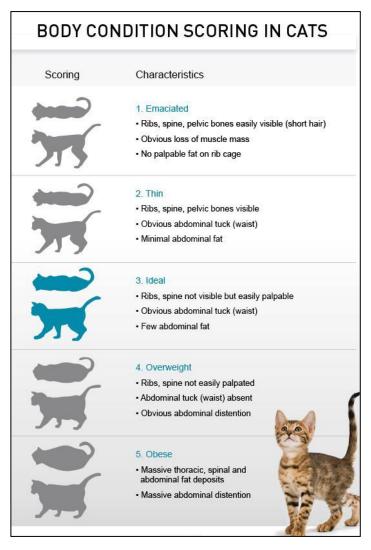
Weight loss is also common in senior cats

Weight loss is one of the most common symptoms we see in older cats. Many cat owners jump to the conclusion "It must be cancer, there's nothing we can do" when their pet is older and losing weight. Happily, cancer is not the most common cause. Many treatable diseases, such as kidney or thyroid disease, are much more common.

Say an older cat is losing weight and not eating as well as it once did. This is a common scenario with lots of possible causes. An examination will reveal whether the cat has infected teeth that might be making eating difficult.

Blood testing may show kidney disease. Next we would check a urine sample to see if we can figure out what's causing the kidney disease. If urine testing shows an infection we

DO YOU KNOW YOUR CAT'S BODY CONDITION SCORE?



would treat that with antibiotics. If not, an x-ray of the abdomen might reveal a kidney stone, for which we might want to change the cat's diet.

If, on the other hand, a heart murmur and high blood pressure were found during the examination, the blood testing may reveal a high thyroid level, which can cause both of those symptoms. Medication might be needed for the thyroid problem.

Nutrition recommendations

The best diet for older feline patients should be well-balanced, nutritionally complete, highly palatable, highly digestible, and contain extra potassium and taurine. Hill's Pet Food started adding extra fatty acids and antioxidants to Science Diet foods many years ago, and Hill's is still our first recommendation in pet diets. Royal Canin, Purina ProPlan and Eukanuba are other high quality brands. If your cat has a specific medical problem that may be helped by special diet, then that diet is the best thing to feed.

Better nutrition is now available because of ongoing research in this field. There are essential nutrients being delivered in today's pet foods that weren't even discovered 30 years ago. We'll be talking to you about these topics with each annual exam visit to the hospital because these things are the keys to a long and happy life for your pet.

- The addition of extra fatty acids, antioxidants and fiber to an older cat's diet has been shown to extend life expectancy by over a year
- Cats that receive these extra nutrients also have better quality of life and maintain their weight better in their last year of life. Starting an enriched diet early in life is one of the best ways you can help your cat to live longer.
- Premium pet food companies such as Science Diet and Royal Canin carefully control the amounts of nutrients contained in their foods, so that nutrients are supplied in the correct amount neither too much nor too little.
- Only four manufacturers meet all the standards we expect them to.

Nutritional excesses are more damaging to today's pets than deficiencies. Cheap grocery store brands of food won't cause your pet to die from malnutrition. They will, however, increase stress on the liver, kidneys and heart, and contribute to a number of different diseases by delivering excessive amounts of sodium (salt), fat, phosphorus, magnesium, protein and calories. This can be a big problem for elderly cats with kidney, liver or heart disease.

Expensive pet store diets are sometimes not a big improvement over inexpensive grocery store ones. Many put a lot more money into marketing campaigns than they do into the food. Most companies don't even have a nutritionist formulating their diets.

Older cats tend to eat more meals but smaller meals than younger cats. Leaving food out all day may help these cats maintain good body weight.

Nutrition Facts

- Grain free diets cause disease, especially heart disease, bladder stones and obesity.
- Cats choose a food based on texture, or on nugget size or shape. It's not the
 taste or smell, it's "mouth feel."
- Geriatric animals have a decreased thirst response. They are more likely to become dehydrated with illness or even during routine hospitalization or boarding. Canned food, water fountains, low sodium chicken or beef broth, and clam juice can all be helpful tools to encourage water intake. Tuna juice can be frozen into ice cubes.

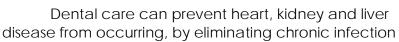
For accurate nutrition information, visit wsava.org or our website, www.bestfriendsvet.com and YouTube channel, BFVCTV.

 Poor appetite can be due to decreased taste sensation but could also be from dental disease, illness or a change in surroundings. Poor appetite is always a reason to call us. That said, feeding highly aromatic (smelly!) diets and warming food to body temperature before serving will improve palatability.

Dental Care

The most common disease of pets is...

- **Periodontal disease**, which affects over 80% of cats by age three.
- Dental care extends life expectancy an average of two years.
- Dental problems are painful, though your cat can't tell you her mouth hurts. If it would be
 - painful to you, it is painful for them as well.
- Tooth resorption eats holes in cats' teeth. 60% of cats will develop one or more of these painful lesions in their lifetime, some at a very young age.



of the teeth and gums. New anesthetics and the availability of in-house lab equipment have made anesthesia for dentistry safer and diagnosing diseases faster than ever.

Disorders in the mouth are often overlooked as the cause of significant illness in geriatric cats. Common signs of oral disease include poor appetite, weight loss, halitosis, chattering teeth, abnormal chewing and/or swallowing behavior, decreased grooming, or nasal discharge.

Eating slowly or showing a new preference for canned food may indicate oral pain

Pain Management

To the 3 D's we would add treatment of painful diseases. The most important concept to remember is that animals hide pain.

Your cat is not going to cry if she is painful. Pain symptoms are subtle and limping is not a common

sign of arthritis in felines. It is estimated that half of all cats in the U.S. have some degree of musculoskeletal pain. That's 40 million cats! Could yours be one?

Arthritis, like kidney disease, begins years before symptoms become apparent. The first changes within the joints begin at around age nine. By age twelve, 90% of cats have arthritis visible on x-rays, though most still have no outward signs that owners notice. By age fifteen, most cats have symptoms but many cat owners miss them.

Symptoms of Pain

- Slowness, stiffness, difficulty rising or jumping up
 - o Did your cat used to race up or down the stairs but now she goes slowly?
 - o Did he stop climbing up to a favorite high perch or counter?
- Sleeping more, less responsive to activities going on (it's not just "old age!")
- Playing less often or for shorter amounts of time
- Unkempt fur from not being able to twist and bend to groom
- Missing the litter box due to difficulty squatting or getting in or out
- Decreased appetite or weight loss





Arthritis contributes to "slowing down" with age, and reduces enthusiasm for exercise. This starts a vicious circle of pain leading to less exercise leading to more pain. Arthritis medication may make a huge difference to the cat's quality of life.

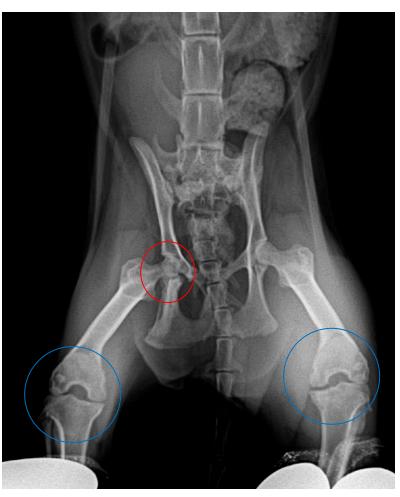
ARTHRITIS IN CATS

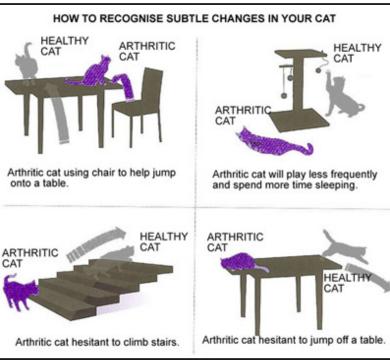
- Almost all cats over the age of twelve 90% are suffering from some degree of arthritis.
- The earlier arthritis is treated the longer joint function will be preserved.
- Keeping your pet at the proper body weight will minimize wear and tear on the joints and spine over time.
- Provide fish oil and glucosamine after age 9.
- Begin anti-inflammatory medication as soon as the first signs appear.
- Early intervention has been found to greatly slow the progression of arthritis in both people and pets.

The cat on the right has hip dysplasia. The right hip, which appears to the left in the picture, circled in red, has a small, misshapen femoral head. The knee joints, circled in blue, show severe arthritis.

Dermatologic Changes

Older cats typically spend less time grooming. The skin and coat tend to become drier with age. Owners should brush mature cats frequently, thus helping to remove debris and improve the distribution of natural oils on the skin and the hair. If necessary, the cat can be bathed with mild hypoallergenic, nondrying shampoo. Long-haired cats may have more problems with hair mats as they age and the coat may need to be clipped to make it





easier for the owner to groom the cat. Obesity and arthritis also restrict mobility and the ability to groom adequately.

In Summary

Only 43% of pet owners polled believed their pet's quality of life could be improved. Yet most arthritic pets are under-medicated for pain and millions go without dental care and regular veterinary check-ups. Early diagnosis and treatment of a myriad of diseases are the keys to a long healthspan and improved quality of life!

Wellness Recommendations:

- Examinations should be done at least annually for younger seniors, twice a year from age twelve on. This should include blood pressure measurement.
- Annual blood and urine screening between the ages of 9 and 11, semiannually after that
- Annual stool testing
- Provide dental care as needed
- Provide pain medication when needed
- Provide a veterinary-recommended diet
- Supplement glucosamine & fish oil

A little testing and tender loving care should keep your cat purring for a long, long time.

