THE AGING PROCESS

Your pet may be getting older, but the care you give 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.

As pets age, two types of changes occur: age related changes and pathological changes. Age related changes, such as vision and hearing loss, are normal, and develop in

most animals. These changes cannot be prevented, but you and your pet can learn to adapt to these changes. Many pathological changes or diseases can, on the other hand, be prevented or successfully treated. With good care to promote health and prevent disease in geriatric pets, your pet can remain healthy and active well into its twilight years.

Your veterinarian can help you to 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.

One of the most important keys to helping your dog or cat live longer is meeting his or her dietary needs. Obesity and weight loss are both common in older animals. Kidney, liver or heart problems may change a pet's requirements for sodium, phosphorus, protein and fat. Changes in activity levels and muscle mass are common in older animals, as are changes in their ability to digest and utilize

If your pet's vision is not good, try dabbing some perfume, aftershave or other scent on furniture legs, doorframes or steps on a weekly basis. Your pet will be able to smell these objects before bumping into them, making getting around the house a lot easier.

nutrients. Your veterinarian can help you determine the type of food that's best for your aging pet.

Hard of hearing pets may still be able to hear noises that are higher or lower pitched than the mid-range human voice, Try calling it with a sound that is a different frequency than the voice, such as a metal whistle.

Because of advances in medicine, and proper preventative care, pets, as well as people, are living longer, healthier lives. Blood tests, EKGs, fecal exams, X-rays and urinalyses are all performed frequently on geriatric animals. This is because many common problems of this growing population of senior citizen pets, such as kidney and heart disease, can be treated successfully if diagnosed early.

Regular examinations and follow up care by your veterinarian will help insure that your pet

continues to be your loving companion in the years to come.

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

PREVENTATIVE CARE FOR SENIOR DOGS: How do I choose what's best for my pet?

The possibilities are endless. So many vaccinations, pet foods and other products and services exist for dogs, and so many people are willing to give you advice about which to choose. One of the best ways to start planning a health care program for your pet is to do an analysis of his or her risk factors. This will help you narrow your choices and select those that make the most sense. You should also work with your pet's

veterinarian to decide what's right in your situation. Well-meaning but misguided advice from feed mill or pet store employees, groomers, friends and neighbors, even internet sites like this one, can never replace the expertise of a trained professional doctor who knows vou and your dog.

Most of us are familiar with risk factors when it comes to human health. They can be environmental or lifestyle factors, such as smoking, obesity, poor diet or living next to a toxic waste dump. These

Pet owners are 40% less likely to need doctors than those without pets. Owning pets can also reduce your cholesterol level, ease anxiety and lower blood pressure. Heart attack patients who own pets are more likely to survive than non-pet owners.

factors make it more likely that a person will be affected by a particular disease, such as heart disease or lung cancer. Other risk factors may be genetic. If breast cancer runs in your family, your own doctor may want to perform mammograms early and often. If heart disease affects the health of your parents, stress testing and a low cholesterol diet

will be important things to discuss with your physician.

Your Pet's Approximate Age In Human Years

6 months = 12 years 1 year = 15 years

2 years = 24 years 3 years = 28 years

4 years = 32 years

5 years = 36 years

6 years = 40 years

7 years = 44 years

8 years = 48 years 9 years = 52 years

10 years = 56 years

11 years = 60 years

12 years = 64 years

13 years = 68 years

14 years = 72 years

15 years = 76 years

16 years = 80 years

17 years = 84 years

18 years = 88 years

19 years = 92 years

20 years = 96 years

21 years = 100 years

Pets have risk factors, too. They also can have environmental or lifestyle factors which increase their risks for certain diseases. For example, poor diet and obesity in pets lead to medical problems just as they do in people. Many diseases of pets are inherited or have genetic factors as well.

Pets have risk factors, too. They also can have environmental or lifestyle factors which increase their risks for certain diseases. For example, poor diet and obesity in pets lead to medical problems just as they do in people.

Many diseases of pets are inherited or have genetic factors as well. For instance, 5% of Doberman pinscher dogs die every year from a heart disease called cardiomyopathy, and many more are diagnosed with the disease. Because Dobermans are at such high risk for this disease, screening for it should be done at least annually from the time the pet is a year or so old, with an ECG (electrocardiogram, also sometimes called an EKG). If the ECG reveals abnormalities, further diagnostic tests can be done to confirm or rule out cardiomyopathy, and medication can be started which can prolong life expectancy for a year or even 2 or 3 years. If the disease is not detected until the dog shows signs of being ill, life expectancy is only weeks to a few months.

In addition to things like obesity or poor diet, lifestyle factors that cause increased risk of illness in pets include exposure to contagious diseases and parasites. Dogs that go to a groomer regularly or board at a kennel are at high risk for contracting kennel cough. These pets should be protected with a vaccination for this disease. Dogs that have exposure to deer ticks are at risk for Lyme Disease, and again, a vaccination may be recommended. Parasite exposure varies from region to region and also depends on where the dog lives, works or plays. Dogs that visit a dog park will be at risk for intestinal parasites picked up from other dog's stools. Dogs that swim in lakes, streams or ponds may be exposed to the protozoal parasite *Giardia*. Dogs that go hunting in the woods may need strong tick protection.

The most important risk factor for senior pets is often age itself. Many diseases become more common with age. Cancer, kidney disease, heart disease and liver disease are especially frequent in older pets. As your pet gets older you will need to pay more attention to changes in activity level, appetite, water consumption, potty habits and other signs so that you can catch problems early. Your pet's doctor will be watching closely as well, and probably recommending regular blood testing and other diagnostic procedures to look for problems that may be creeping up on your dog.

Because each dog's situation and heredity is different, you will need to visit your veterinarian at least once a year to establish and maintain a health care program that addresses all the risk factors present for your pet. It is part of your veterinarian's job to help guide you as to what care needs your pet may have and to advise you on what products and services might help your pet live a longer, healthier life. Because medicine is constantly changing and new advancements are developed every year, your pet's health care program will probably change with time. Since advancing age is also a risk factor for many diseases, his or her care needs will change with age as well.

It's also your veterinarian's role to help you prioritize, so you can budget for the most important risks first. Some diseases are much more likely or dangerous than others, so you'll need to plan accordingly. It's important to remember, too, that although some diseases are just as common in pets as people, such as allergies or diabetes, others are rare or have different symptoms. The more you know about the signs and symptoms of disease in pets, and the diseases prevalent in your area or your dog's breed, the more you can assist you pet's doctor to come up with the right plan for your situation. Since preventing diseases is usually cheaper, easier and a lot safer for your pet than waiting for illness to appear, knowing what to do to avoid illness is the smart way to go! So ask your veterinarian for advice and remember, your pet's health is truly in your hands.

This table is an example of some of the many risk factors for dogs, and what care may be recommended accordingly.

| Risk factor Ears that hang down | Diseases for which your pet may be at risk Otitis Externa – ear infections | Recommendation Weekly ear Cleaning |
|------------------------------------|---|--|
| Swimming | Otitis Externa, Giardia, skin infection | Ear drying solution |

vaccination

Obesity Arthritis, diabetes, heart disease Diet and exercise program

program

Large breed dog Hip dysplasia, arthritis, bone cancer Screening x-rays,

diet

formulated for

large breeds

Small breed dog Periodontal disease, mitral valve disease Regular dental

in the heart

care, chest x-rays and

ECG as the pet ages

Dental tartar build-up Periodontal disease, tooth loss; heart, Dental cleaning

liver, kidney disease

under anesthesia

Boarding, groomer, Kennel cough disease Vaccination for

Bordetella bronchiseptica

and

parainfluenza, which can cause this disease

Boxers, Doberman Cardiomyopathy Annual ECG

pinschers, English cocker spaniels, all the giant breeds

dog park, other frequent

contact with dogs

screen, echo

cardiogram if abnormalities

appear

Increasing age Cancer; liver, kidney or heart disease Regular

screening tests

The basic care needs that follow are the starting place for any pet health care program. These suggestions will enable you to provide the best health care, allowing your dog to live as long as possible.

MANAGING YOUR OLDER DOG'S HEALTH

Annual physical examination.

A year between physical examinations for your dog is like four to seven years between annual examinations for us. A lot can happen in that amount of time! Your pet's doctor will do a thorough exam of all your pet's major body functions, to see what may be changing and to find problems, such as dental tartar or a heart murmur, that need to be addressed. The annual examination visit is also the only opportunity your veterinarian has

Major Problems Seen In Older

Dets

- Obesity
- Arthritis
- Kidney Disease
- Heart Disease
- Liver Disease
- Tooth/Gum Disease
- Diabetes
- Cancer
- Rear Leg Weakness
- Poor Hair Coat
- Impaired Senses (hearing, sight, smell)
- Memory Loss (loss of habits

all year to tell you about new advances in medicine that might help your pet, or to adjust the health care program for changing circumstances. Once your dog develops symptoms of age-related illness, twice yearly examinations are often recommended.

The time of your pet's annual physical is also the ideal time to do some laboratory testing. Lab tests are like a window into your pet's body. They allow us to see problems that aren't visible from the outside. Testing may include blood tests, stool sample tests, heart tests such as an ECG screen, x-rays to detect heart disease, arthritis or other problems, and urine testing, to catch diseases of the kidneys or bladder. Many apparently healthy pets have organ dysfunctions that show up on lab testing, thus allowing for earlier diagnosis and more successful treatment. Testing becomes even more important as your pet gets older.

Nutrition, behavior, dentistry and most of the other topics listed below are appropriate for discussion with your cat's annual visit to the hospital. These suggestions will enable you to provide the best health care allowing your cat to live as long as possible.

• Nutrition.

Feed the highest quality food you can afford. Premium pet foods available in pet stores or at a veterinary clinic are much more digestible and result in a healthier pet with less stool volume. DO NOT feed table scraps and human snacks. Older pets are more prone to dietary upset from too much variety in the foods they eat.

Many senior pets have dull, dry coats. Vitamin supplements may be needed. Supplements also help with arthritis, inflammatory bowel disease and kidney disease. Constipation is a common and uncomfortable problem in older dogs. The fiber content of your dog's food is very important and supplements are available for this as well.

Make sure your older dog doesn't have to compete for food with younger, stronger dogs. You may need to feed old or alling animals separately to ensure they are receiving their fair share.

Be careful in choosing brands of food and treats for your dog as well. One of the most important factors in living a long, healthy life is nutrition. Some manufacturers are better than others. Many diets and treats contain high levels of sodium, fat or artificial colors and flavors. Labels and advertising claims can be deceiving. Be sure to ask your veterinarian what food is best for your pet, what treats are most healthy and how much food should be fed each day. Click here for more information on nutrition.

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• Internal Parasites . . .

threaten your dog's health. In large numbers they can cause intestinal blockage, bloody diarrhea and even death. Older dogs are more susceptible to parasites. Certain types can also affect you and your family. Microscopic examination of your pet's stool needs to be done regularly. Click here for more information on internal parasites.

Spay or Neuter your Pet

The average life expectancy of a spayed or neutered pet is 40% longer than an unspayed one. Over 60% of dogs that are hit by cars each year are unneutered males. 60% of unneutered males will also develop prostate disease or cancer. 75% of unsprayed females will develop breast cancer and 75% will develop a serious uterine infection called pyometra. Many will develop both problems. If you want your pet to live a long time, have him or her altered! Click here for more information on pyometra.

- Provide a constant supply of fresh, clean water.
- Increased thirst is a symptom of several serious diseases. Please notify your veterinarian right away if your pet seems to be drinking or urinating more than in the past.
- Provide adequate shelter if your pet is an outdoor dog.

Older pets are less tolerant of cold and heat and may have worse arthritis in cold or damp weather. Even if your pet has been outdoors all his life, he may need better shelter as he ages. Click here for more information on building a doghouse.

Keep your pet under control.

Don't let it run loose. Purchase an I.D. Tag to place on your pet's collar and keep it on at all times. It is your pet's "ticket home" if lost. Consider a microchip or tattoo for permanent identification. Click here for more information on microchipping.

Vaccinations and boosters.

Older animals, like older people, have decreased resistance to disease. Unfortunately there is no safe, effective drug available to combat any of the major viral diseases of dogs. Vaccination is the only effective form of protection. Vaccination enables your dog to fight infection by stimulating the immune system so it makes antibodies against the viruses.

To maintain this protection, dogs must be vaccinated regularly so the level of immunity is always high enough to prevent disease. Immunity produced by vaccination does not last forever. It is very important that your dog be re-vaccinated regularly. Distemper, Hepatitis and Leptospirosis are all widespread, contagious and deadly diseases. Nearly every dog will be exposed during its lifetime. These diseases are usually all included in the "distemper" vaccination.

Parainfluenza and Bordetella cause "kennel cough", a common and debilitating upper respiratory infection. The more your dog comes in contact with other dogs (at the groomer's, boarding, meeting other pets on the sidewalk or in the park) the greater the risk. Vaccinations for these infections may be administered as an injection or by nose drops. Click here for more information on Bordetella vaccination.

Parvovirus causes bloody diarrhea as it destroys the immune system and intestinal lining. It is often fatal even with costly intensive care. Worldwide, Parvovirus is the deadliest virus, killing more dogs than any other disease. Parvovirus vaccination is usually included in the "distemper" vaccine. Doberman Pinschers, Rottweilers and pit bulls are especially vulnerable to this disease and often receive extra boosters for it as puppies.

Coronavirus is the second leading cause of viral diarrhea in dogs of all ages. Although not as severe an infection as parvovirus, coronavirus can still be debilitating, especially to puppies.

Rabies is a fatal infection of the nervous system that attacks all warm-blooded animals including humans. There is no cure. Rabies has been on the rise for the past several years, especially along the East Coast. Because Rabies is a risk to humans as well as to pets, all dogs and cats should be vaccinated regularly.

Lyme Disease, usually carried by ticks, poses a serious health risk to both dogs and people. Lyme disease causes crippling arthritis and heart, kidney and nervous system damage. Dogs with exposure to deer or deer ticks are especially at risk. The disease originated in Lyme, Connecticut, and is common along the East Coast and New England, the Great Lakes states, especially Wisconsin, and some areas along the West Coast as well. Click here for more information about Lyme Disease and Lyme vaccination.

Giardia is a water-bourne parasite which can be harbored in the intestinal tract and flare up with stress or other illnesses. Shed by many wild animals, and also infectious to people, it lingers in lakes, streams or ponds, and even in puddles in your yard. It is frequently found in dogs that swim or hunt. It is also common in breeding kennels and is readily passed from mother dog to puppies. A new vaccine can protect your dog, and therefore your family as well, from this disease. Click here for more information on Giardia vaccination.

Vaccine protocols have changed in recent years, as new diseases have appeared and spread, and new vaccinations have been developed. Parvovirus did not appear until the 1970's and vaccines for the disease have become much more effective over the last few years. There was no vaccine for Lyme Disease before 1990. Your veterinarian's vaccination recommendations have probably changed over the years. Chances are good that they will change again over the next ten years. As your dog comes in for annual physical exams your veterinarian should be talking to you about new vaccines and vaccination schedules.

Dogs are exposed to lots of other diseases, so you need to decide on a total health care package for any dog, especially one that has exposure to other dogs or lives outside. This will usually include vaccination for Distemper, and the other viruses included in the DHLPPC vaccine and Rabies for all dogs. Bordetella, Lyme or Giardia vaccinations may also be recommended. Dogs should also be protected against fleas, if you live in an area where they are a problem, and intestinal parasites, as part of a regular health care program

• Heartworm Disease . . .

is serious and deadly. It is carried by mosquitoes. A blood test is needed to check for these parasites and daily or monthly medication is given to prevent this disease. Click here for more information on Heartworm Disease and prevention.

DOES YOUR DOG SUFFER FROM ARTHRITIS?

If your dog seems stiff when rising to his feet, especially after sleeping, has trouble getting up or down stairs, seems slow or less active than usual, sleeps more or interacts less with the family, or seems cranky or irritable, he could be suffering from arthritis. If you notice any of these signs in your pet, call your veterinarian for an appointment today! Click here for more information about arthritis in dogs.

Dental Care . . .

is just as important for your pet as it is for you. The average lifespan of a dog that receives timely dental care is 10-20% longer than one that doesn't. Infected teeth and gums are very painful to your dog, and also spread infection to the kidneys, heart, liver and elsewhere. Today's safer anesthetics make dental care possible even for elderly pets, and this care can be critical to quality

of life. Dental cleanings are a necessary component of a long, happy life for your pet. Click here for more information on dental care and to learn how to brush your pet's teeth.

Prevent Obesity.

Extra pounds burden the heart, kidneys, joints & muscles, decreasing life expectancy 30-50%. Click here for more information on weight control and exercise.

Exercise.

Most dogs don't get nearly enough exercise. Poor health, obesity and boredom-related behavior problems often result. Even older dogs should be encouraged to play and exercise as long as they can do so comfortably. Play keeps the mind as well as the muscles in better shape.

• Groom and trim nails as needed.

Older dogs sometimes become lax in their grooming habits, especially if arthritis makes it hard for them to stretch and bend. Extra care with grooming may be needed. Keep an eye out for fleas, dandruff, sores or bald spots. Report any skin problems to your veterinarian. Also keep a close eye out for lumps and bumps. Tumors in and under the skin are very common in older dogs. The earlier they are taken care of, the less danger they will spread to other organs. Click here for more information on cancer in pets. Click here for more information on the care of your pet's skin, coat and nails.

• Parasite Prevention

Preventing fleas with regular use of effective flea products is much less costly than treating a full blown infestation of fleas in your home. DO NOT waste your money on overthe-counter flea products. Most do not work and some can even be harmful to your pet, especially if he or she is ill or on medications. Some of the flea products available overthe-counter at pet stores or supermarkets can be fatal to cats who were merely in the same house as a dog on which one of these products was used! Your veterinarian has products that provide good control safely, and they will take the time to individualize a flea program to suit your requirements and budget. Click here for more information on fleas and flea control.

Modify your pet's environment if necessary

Arthritis may make it more difficult for your older dog to get around. Getting up and down stairs may be more difficult. A softer bed, slower or shorter walks, fewer stairs or a ramp, throw rugs to help provide traction on slippery floors, or a step stool to make the jump up onto the couch a smaller leap are examples of things that might help your dog as he or she ages. Any urinary or stool accidents should be brought to your veterinarian's attention, as they usually signal a medical problem. If an age-related disease causes accidents, you might want to install a dog door to a fenced yard or have a neighbor let your pet out at lunchtime if you will be gone for the whole day. Sometimes simple changes in routine can help give your pet more dignity and relieve suffering. Pets that have been housebroken all their lives and who are now unable to control their habits often become very distressed by their accidents.

• Spay or Neuter your Pet

The average life expectancy of a spayed or neutered pet is 40% longer than an unspayed one. Over 60% of dogs that are hit by cars each year are unneutered males. 60% of unneutered males will also develop prostate disease or cancer. 75% of unsprayed females will develop breast cancer and 75% will develop a serious uterine infection

called pyometra. Many will develop both problems. If you want your pet to live a long time, have him or her altered! Click here for more information on pyometra.

• Keep your pet under control.

Don't let it run loose,
especially at night. Roaming dogs
are at much higher risk for accidents

Injury to humans is 5-9 times more likely from male dogs, intact OR neutered. Early exposure to sex hormones in the uterus may be more important to aggression than the testicular hormones that begin circulating after puberty. Neutering may help with aggression but it is a long way from a cure.

In 1992, 6.3 million dogs were put to sleep because they had no home. 56% of dogs who enter shelters and humane societies each year are euthanized. Walk down the aisles of your local shelter and imagine that every other dog you see will be put to sleep. The percent of cats adopted is even lower.

and disease. Purchase an I.D. tag to place on your pet's collar and keep it on at all times. It is your pet's "ticket home" if lost. Consider a microchip or tattoo for permanent identification. Click here for more information on microchipping.

• Flea Control . . .

is essential. Preventing fleas with regular use of effective flea products is much less costly than treating a full blown infestation of fleas in your home. DO NOT waste your money on over-the-counter flea products. Many do not work and some can even be harmful to your pet. Products available from your veterinarian's office provide good control, have been rigorously tested and are proven safe for your pet. Veterinary staff members will also take the time to individualize a flea program to suit your requirements and budget. Click here for more information on fleas and flea control.

Invest in Training

80% of dogs surrendered to humane societies have had no obedience training. Teaching your dog to be a well-behaved family member is one of the responsibilities of owning a dog. Lack of training makes for an unruly pet who is not a pleasure to own and thus can end up as a euthanasia statistic instead of a cherished family member. Dog training classes build a strong bond between owner and pet, help you channel your dog's natural behaviors into constructive outlets and are a lot of fun besides! Click here for more information on behavior, training and socialization.

• Never give human medications to your dog without checking with your veterinarian.

ECG screening

Boxers, Doberman pinschers, English cocker spaniels and all the giant breeds of dogs are prone to a heart condition called cardiomyopathy. Up to half of all dogs of these breeds will eventually develop the disease. In cardiomyopathy the heart muscle thins and deteriorates, eventually leading to heart failure.

Cardiomyopathy can start as early as 6 months of age or as late as 15 years of age, but most affected dogs start developing symptoms at 6-8 years of age. By the time symptoms develop, the heart is already severely damaged. Life expectancy at this stage is usually short-months to a year or two.

5% of AKC registered Doberman pinschers die each year from cardiomyopathy.

Diagnosing the disease early, and starting the affected pet on heart medication, can prolong life expectancy for these dogs by 1 to 3 years. Echocardiography is the most accurate way to diagnose the disease, but many dogs will start to show abnormalities on an EKG in the early stages of the disease. A simple EKG strip, done once a year, often for

less than \$30, is a screening test for cardiomyopathy that can be done annually for all dogs of susceptible breeds over one year of age, along with their annual vaccinations.

The risk for many types of heart disease increases with age. Heart disease is the second leading cause of death in older dogs. Regular ECG screening, chest x-rays and even echocardiograms are recommended for older dogs to find problems early, when treatment is most effective.

| Dog's Age | Human Age |
|---|---|
| 7- 9 YEARS 8-10 YEARS 9-11 YEARS | OVER 40 YEARS OVER 50 YEARS OVER 60 YEARS |

Wellness Testing for the Life of Your Dog

Pets age more rapidly than humans. With the aging process changes occur in the function of the body. Some of these changes can be seen from the outside:

weight gain or loss, stiffness, dull hair-coat, loss of sight or hearing. Some changes, however, occur internally and can't be discovered without laboratory testing. Unfortunately, by the time symptoms of illness can be seen, in liver or kidney disease for example, organ damage is already in the advanced stages.

In order to detect organ damage in its early stages, when it can be treated most successfully, we recommend annual blood testing as part of your pet's yearly physical examination once he or she is over 7-9 years of age. This blood testing can also be used to provide a baseline for comparison in the event of future illness, allowing your veterinarian to identify changes which may assist in faster, more accurate diagnosis and treatment.

Test results serve double duty by providing information before surgery or dental procedures, allowing for safer anesthesia.

Early defection can mean a longer, healthier life for your dog.

• Report any changes . . . or problems in your dog's health or behavior to your veterinarian as soon as possible. Diseases or behavioral problems are usually more successfully treated the earlier they are addressed. Click here for more information on signs of disease in pets.

Preventative health care is much more than just vaccinations! Your veterinarian is there to help you assist your pet in living a long, healthy life at the lowest cost to you.

Please use this checklist on a regular basis. You can discover many problems before they become serious and cause undue pain and expense.

HOME CHECKLIST FOR PET HEALTH

My Pet . . .

- . . . is acting normal active and in good spirits.
- ... has a normal appetite with no chewing or swallowing difficulty.
- ... breathes normally, without straining or coughing.
- ... urinates in the usual amounts and frequency.
- . . . has normal appearing bowel movements.
- ... walks without stiffness, pain, or difficulty.
- . . . has healthy looking feet and short nails.
- ... has a full, glossy coat in good condition.
- ... has skin that is free from dry flakes and not greasy.
- . . . is free from fleas, ticks, lice or mites.
- ... has eyes that are bright, clear and free of matter.
- ... has ears that are clean and free of debris and odor.
- . . . has a moist nose, free from discharge.
- ... has clean, white teeth free of plaque and calculus.
- ... has gums that are pink with no redness and non-offensive breath odor.
- ... has a body that is free from lumps/bumps as I run my hand over its entire body.

Call your veterinarian if you answer no to any question.