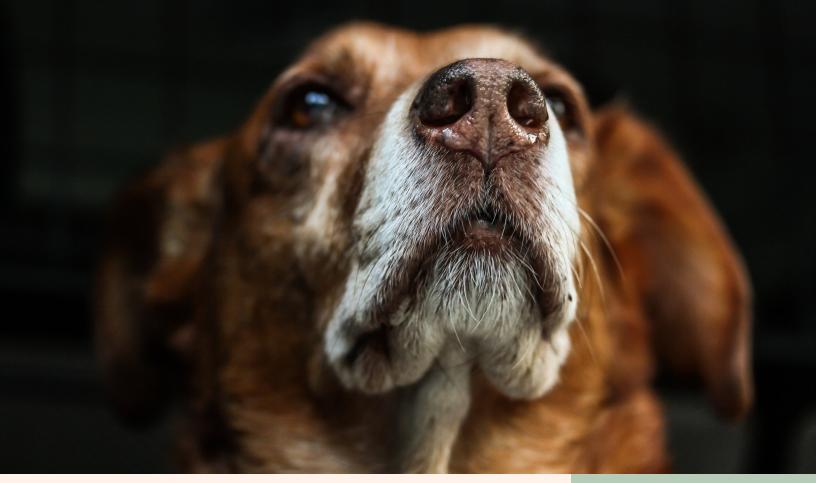


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There has been very little research into the problems associated with old age in dogs until recently. Little was known about the behavioural and physical changes accompanying the aging process in dogs - primarily because few dogs lived long enough to demonstrate these changes. Even now, the majority of dogs die before they reach old age.

The average lifespan of a dog today is 12 years, with a maximum recorded age of 27 years.

Sound management, modern medicine and preventive health programs, coupled with an increasing desire by both dog owners and veterinarians to care for older dogs is now resulting in much greater potential for longevity in dogs.

In other words; there are MANY things that you and we (your veterinarian) can do to give your pet the best opportunity for good health and a long life.

To give your pet the greatest opportunity – start preventative programs from late adolescence or early middle age.

In this quick primer, I'll share just some simple insights with which you can get started. To learn more about this topic please give me a holler or come in and see me - I'm passionate about 'senior' pets and maximizing their health and long life.

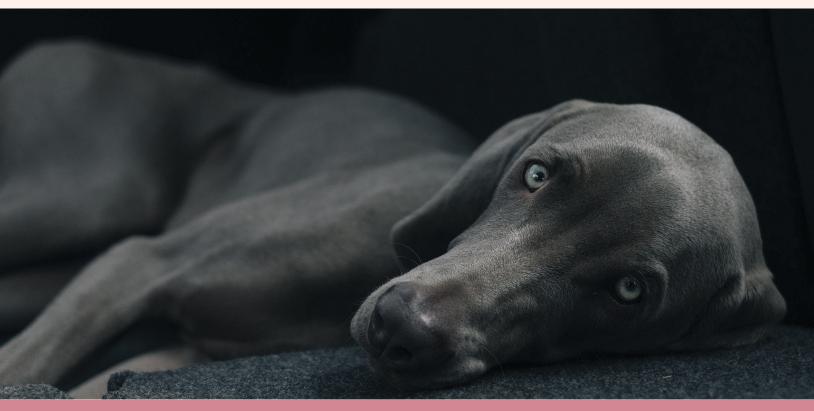
GENERAL CARE OF YOUR OLDER DOG

LONGEVITY: GENETICS AND ENVIRONMENT

Both genetic and environmental factors (environmental factors include – dental care, nutrition, exercise, parasite prevention and many other factors) affect a dog's longevity. As a general rule, female dogs live longer than males, and neutered (spayed or castrated) animals live longer than intact (unaltered) ones. Small- or toy-sized dogs live longer than large-sized dogs, and confined dogs live longer than free-roaming dogs.

Resistance to disease and the ability to improve survival through efficient adaptation to environmental changes are usually associated with hereditary factors. The capacity to live longer is more pronounced in some dog families, indicating the importance of genetics as a factor.

Although you (as a dog pet parent) have no control over your pet's genetic makeup, you MOST DEFINITELY can exercise some control over the environmental factors which promote longevity in your dog. REMEMBER: the general condition of an old dog tends to reflect the care it has received throughout its life.



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NUTRITION

A great diet plays an extremely important role in the aging or rather – in the SLOW-ING down of the ageing process.

Restricted, balanced diets - in addition to helping puppies and younger dogs remain healthy and active - may also delay the onset of major diseases, thereby prolonging the dog's lifespan.

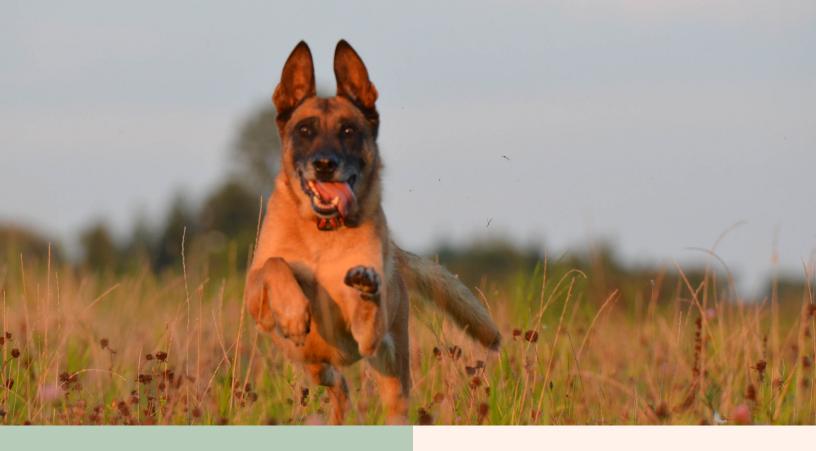
On the other hand, a poorly balanced and/ or excessive diet which leads to obesity in dogs actually accelerates the maturation process and shortens the dog's lifespan.

Let's simplify this; typically, the foods or diets that will help your dog live the longest, are typically the most expensive. It's that old scenario – you get what you pay for.

Also – it's VERY, very difficult indeed to provide an adequate, balanced homemade food for your dog. Commercial diets are generally much better for your pet.

Older dogs with specific problems in vital organs (e.g., the heart, kidneys, liver) or with certain other health problems may require specially formulated diets.

These 'prescription' diets are available commercially, or special diets can be prepared in the home to provide balanced nutrition that will not put undue stress on damaged vital organs.



VETERINARY CARE

The life of the older dog can be greatly extended by regular veterinary care. Regular vaccination programs for the common infectious diseases prolong a dog's life considerably. Quality sanitation and parasite control programs provide the same benefit. Regular dental care is also important.

STRESS

The amount and degree of stress a dog encounters greatly affect its longevity. Free-roaming dogs live far shorter lives than confined ones due to traffic accidents, hostile neighbours and contact with sick animals. The absence of stressful conditions in the dog's home life can prolong its life by reducing the likelihood of the debilitating changes which often accompany stress.

DESEXING

Studies show that dogs that have been neutered (spayed or castrated), preferably at an early age, live longer than intact (unaltered) dogs.

However, larger dogs should not be desexed till all the bones have had time to fully develop, lowering the incidence of cruciate rupture.

There's a balancing act at play here...

EXERCISE

Older dogs need to exercise! Regular daily exercise improves circulation, maintains muscle tone and improves waste elimination. It also helps with better flexibility, joint movement and minimizes the effects of arthritis.

Each older dog should be assessed individually to determine the exact level of exercise that best suits that particular dog.

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OLD AGE IN DOGS

Despite all the beneficial care you and your veterinarian (me) may give to each individual pet, the aging process will continue. It is vitally important that you are aware of the normal changes that occur in the aging dog.

All living creatures must eventually die, and death is usually preceded by an inevitable series of behavioural and physical changes as old age takes its toll.

While no one - veterinarians and pet owners included - can prevent death, we can and should make every effort to prevent suffering associated with gradual degenerative changes that signal the transitional phase between life and death. Improved understanding, coupled with better veterinary capabilities and better owner care at home, can do much to lessen the stress of old age in your dog.

Changes in a formerly healthy and active dog attributed to senility (i.e., the problems associated with old age) are often frustrating and depressing for a dog owner as well as for the animal itself.



Since senility marks the beginning of the end, those who love their animals may have difficulty accepting the inevitable. This period in a dog's life can be an emotional one for the dog owner. It is a time, however, for you to be as rational as possible; your pet needs you more now than ever before.

The dog can suffer even greater physical and behavioural 'insult' if the owner overreacts to the changes accompanying old age.

Negative behavioural changes may occur before any noticeable physical deterioration takes place in your aging dog. Therefore, any attempts to punish your dog for behavioural changes associated with aging will only make the dog suffer more.

Rather, you need to come in and have your dog assessed. There are many ways in which we can counter the effects of ageing on your pet's brain. Did you know for example, that there are now 'games' that you can play with your dog which will COUNTER the effects of brain aging and senility? Yep – just like the 'games' that most of us humans will have to engage in as we get older.

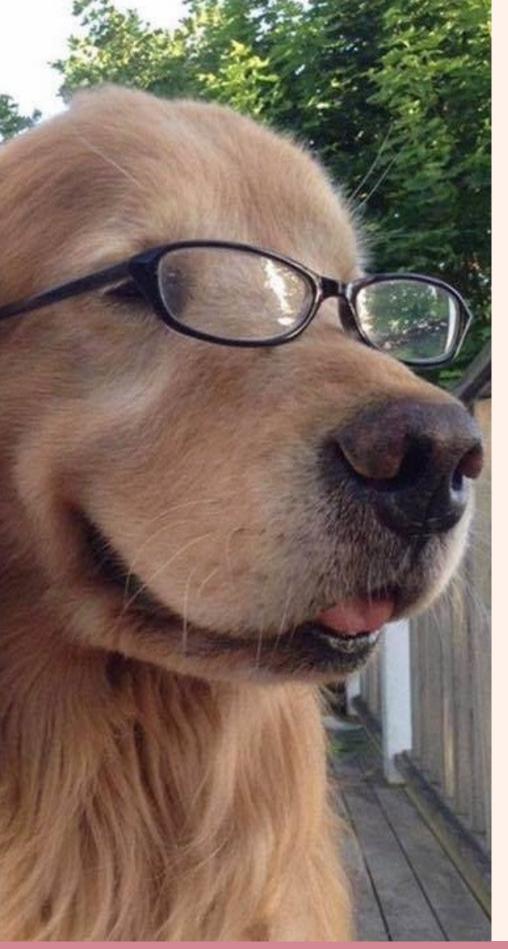


Changes in behaviour are quite common in aged dogs. Older dogs tend to seek out human company more often. They are often lazy and apathetic, tending to sleep more during the day and to be more restless at night - in contrast to their habits as puppies. Greed and fear may increase in old age. And there are things that can be done to manage these changes.

During periods of hospitalization or kennelling, older dogs may bury their food in paper, bark incessantly, chew on the cage and/or their feet and be reluctant to eat. Anxiety and restlessness are common.

A reduction in the desire for exercise as well as the ability to exercise frequently accompanies old age. The ability to maintain housetraining standards is often lost as well.

BEHAVIOURAL CHANGES IN THE OLDER DOG



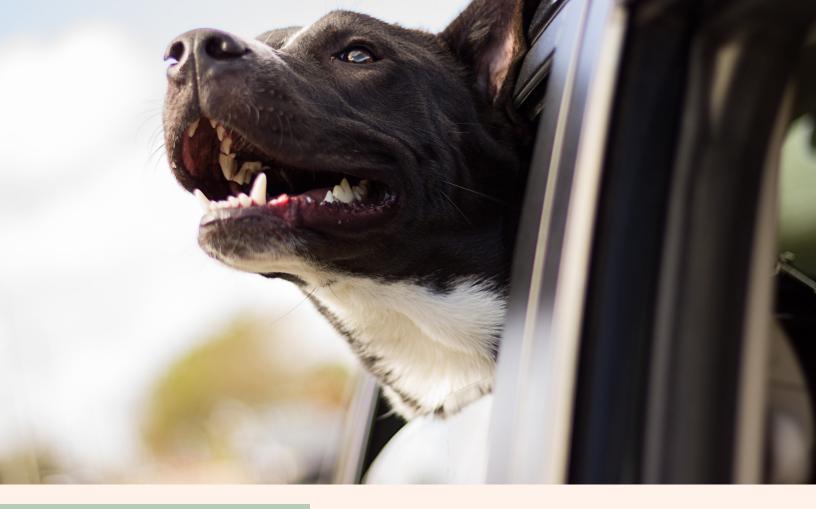
As the dog ages, these behavioural changes may become more pronounced and the problems associated with the changes more severe.

You can assist your aging pet by attempting to alleviate any condition which promotes these problems.

Thus, if your dog is lazy and apathetic, you should make sure your dog gets plenty of regular exercise without making him or her endure true physical hardship.

Plenty of your attention and companionship can help to reduce anxiety, and an understanding attitude rather than a scolding one is in order for any lapses in bladder or bowel control.

There are now many new products available which can control/help manage senility and ageing changes in older dogs. Often even simple things like multivitamin supplements, Omega 3/6 fatty acids, Turmeric can be a great aid. And of course, there are now some great 'prescription' diets available to manage the effects of ageing in your older dog.



PHYSICAL CHANGES AND MEDICAL PROBLEMS IN THE OLDER DOG

As in humans, the dog's body and its supporting systems gradually wear out. These erosive processes usually occur slowly and are often distinguishable only over a period of time.

These changes affect all parts of the aging dog, with some occurring sequentially and other simultaneously. All represent problems for your pet and can make his/her life shorter, less enjoyable and more painful.

Compounding these debilitating problems is the older dog's decreased ability to respond quickly to diseases and other threats.

Recovery from any particular disease, including stress, boarding, etc. tends to take longer in the old dog. It is estimated that it takes an additional 24 hours of recovery time for each 5 years of age. Much of this delayed recovery time results from the kinds of physical changes discussed below.



Dental problems such as the accumulation of dental calculus, periodontal disease and tooth socket infections are commonly seen ailments in the older dog.

Studies show that dental disease is one of the MAJOR reasons why many dogs do not get to live out to their full potential.

And that's a travesty – because dental disease is a disease that can be readily managed – at any stage of the disease process and no matter what the age of the dog.

Obviously, the better your dog's teeth are maintained from puppy-hood (good dental diet and regular veterinary examinations), the better.

But do NOT let your dog's advancing years, not the severity of your pet's bad breath or manky teeth put you off having him looked at and treated. It's never too late to get your pet's teeth attended to.

By the way – even though a dog with bad teeth and gums won't show pain, trust me – it's a VERY painful disease to have. Ask any human who has been so unlucky.

TEETH AND GUMS



DIGESTIVE SYSTEM

As the dog ages, s/he becomes susceptible to a whole host of problems relating to the ingestion of food and liquid. The problems can literally begin at the mouth and end at the anus.

For example:

- The salivary glands may produce less saliva as a result of a major increase in fatty tissue in the salivary glands.
- A decrease in muscle tone of the oesophagus muscles also commonly occurs.
- Older dogs are less able to detect the sensation of thirst.
- Constipation or diarrhoea may occur.
- Additionally, poor digestion or absorption of foodstuffs is common.
- All of the above can be readily managed by some slight diet changes.



PANCREAS AND LIVER

The pancreas secretes the hormone insulin and also, the enzymes necessary for digestion. Malfunctioning of the pancreas can cause diabetes mellitus, a metabolic disorder which is more common after 8 years of age.

Other pancreatic problems can result in persistent loose stools and weight loss despite good appetite and a good diet.

A decrease in liver function also often accompanies old age in the dog.

Some degree of kidney degeneration occurs in nearly all older dogs although dogs can still function with only 25% of the kidney function intact.

Chronic kidney disease is more likely in old dogs and is a disease that we are starting to see much more commonly than we used to.

Again, early detection allows the use of many management strategies which allow the kidneys to function much healthier and for much longer.

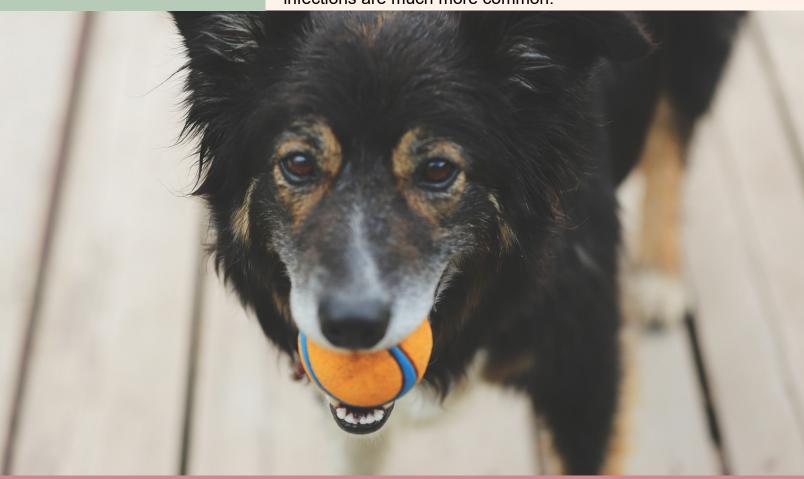
A loss of fastidiousness of waste elimination habits is sometimes the first sign of senility in the old dog.

Also incontinence (loss of bladder or bowel control) and bladder infections are increasingly common as a dog ages.

URINARY SYSTEM

In the male, prostate gland changes are more likely to occur with age, especially in the larger breeds. This is another great reason for desexing males as prostate disease rarely occurs in desexed males.

Note: prostate cancer in dogs is VERY rare, whereas prostate infections are much more common.





CIRCULATORY SYSTEM

Coronary arteriosclerosis (hardening of the arteries) is common in dogs 12 years or older.

Heart disease occurs in at least 25% of 9 to 12 year-old dogs and 33% of dogs 13 and older. Typically this is more likely to occur in the smaller breeds.

Lesions or thickening of heart valves occurs in 75% of old dogs with heart disease.

Problems of the heart and circulatory system can cause pain, difficulty when exercising and lethargy - in addition to complicating any other condition or disease encountered by the dog.

The good news is that modern medicine has delivered us a HOST of very effective medications that will allow most older dogs with heart disease to live full, long, healthy and happy lives.

Again – early detection and early treatment gives by far and away the best results.

RESPIRATORY SYSTEM

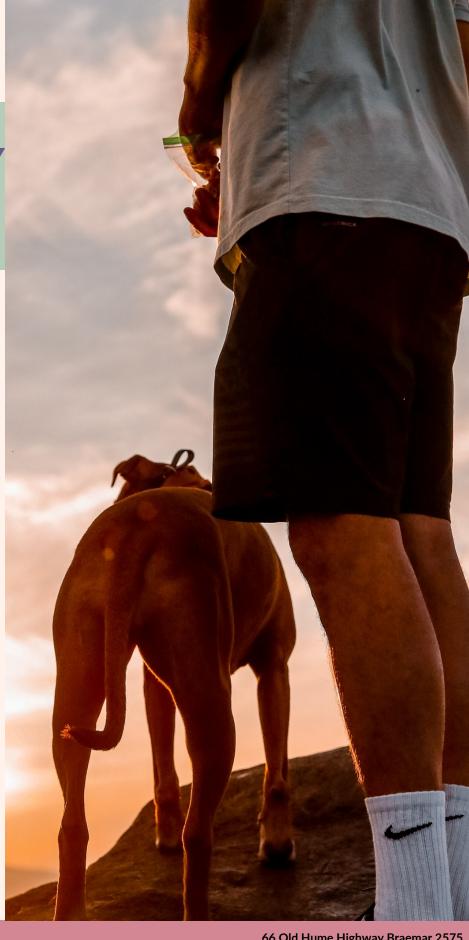
The respiratory problems seen frequently in old dogs are often secondary to heart problems.

That being said, chronic bronchitis, asthma, allergies and obstructive lung disease COPD) and a reduced responsiveness to disease are common respiratory problems.

Old dogs have greater difficulty expelling air, and panting is more common. Therefore more care is needed during the heat of summer.

Also, the incidence of sinusitis (inflammation of the sinus) increases.

In case you are asking, YES – canine respiratory disease is more common in dogs whose owners smoke.



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BONES AND MUSCLES

The changes here are identical to those seen in us humans...

The long bones become thinner, more dense and brittle as your dog ages. Arthritis (inflammation of joints) is the single most common problem of the skeletal and muscular systems.

A general loss of muscle mass occurs with age as the number and size of muscle cells decrease. This process accounts for the postural changes (e.g., bowing of the neck and spine, flabby abdominal wall) and stunted movements often seen in old age.

Old dogs find muscle movements more painful and may walk stiffly after periods of rest. Hence, regular, steady exercise is of paramount importance to maintain healthy, fit muscles and joints.

Herniations (abnormal organ or tissue protrusions) of intervertebral discs, especially in the neck and lower back, are common in certain breeds of dogs. Perineal (pelvic) hernias are most common in 7 to 12-year-old male intact dogs.



As a dog ages, his skin tends to thicken and lose its elasticity. Hair loss increases. Skin tumours and cysts occur more frequently, and nails become more brittle and need more regular trimming or filing

If you see a lump or skin mass on your older dog, then bring him or her in for immediate assessment. Most lumps will be benign and of no consequence but if a lump is one of the 'nasty' ones, then we can remove it quickly and easily while it's still small.

Certain breeds, especially boxers and Labradors are over predisposed to getting various skin and other cancers.





Neural activity can decrease by 10% in the old dog. Changes associated with the membranes covering the brain (the meninges) can cause a dog to become irritable and slow to obey commands. A dog affected by these changes may also have orientation problems and difficulty remembering learned behaviours.

NERVOUS SYSTEM

As I covered of previously, there are various supplements, medications as well as 'mental exercises' that can maintain a healthy and sound mind in the older dog for much longer than once was possible.

SENSES

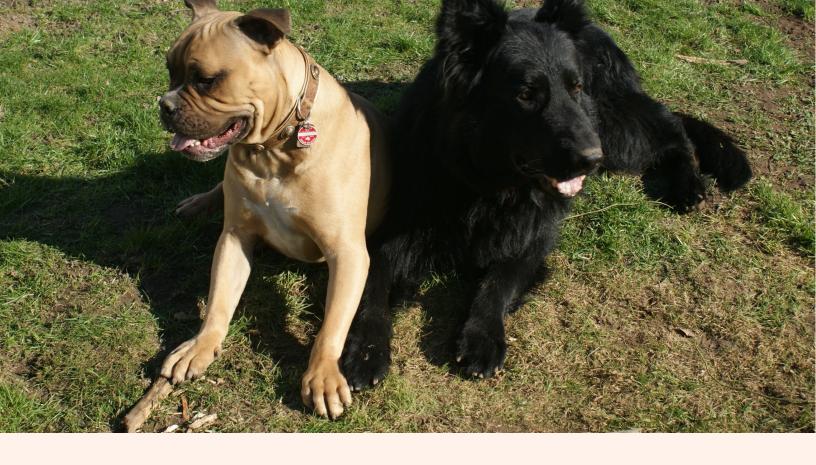
All the senses of your older dog are affected by age, just as in any other species.

The loss of hearing and/or eyesight is common in old dogs.

Retinal degeneration and cataracts are not unusual.

The sense of smell also declines in the older dog.

The good news is that rarely do all three of these senses go at the same time. And so a dog which is losing sight will come to rely more on hearing and smell, etc. This allows most older dogs to continue to remain VERY function into advanced old age.



ENDOCRINE AND REPRODUCTIVE SYSTEMS

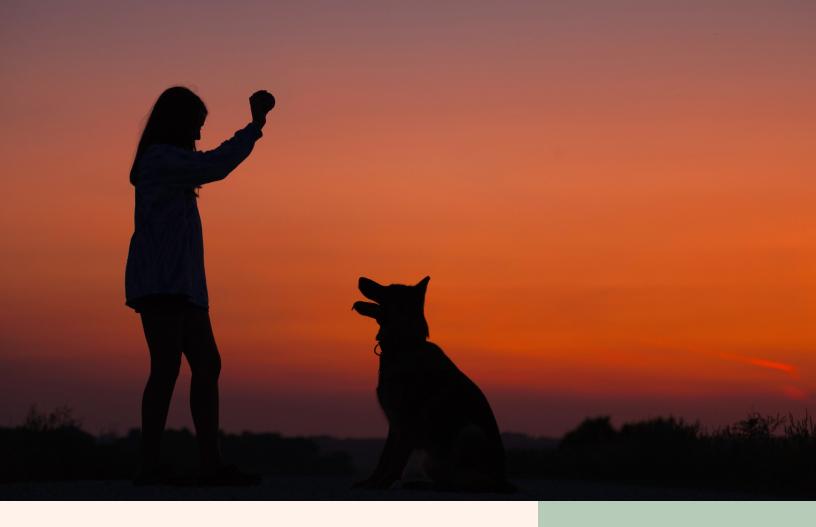
Age impairs the ability of a dog's endocrine system to produce sufficient quantities of hormones.

Degenerative changes adversely affect the thyroid, the adrenal glands, the pituitary and the testicles and ovaries.

Not that we should be breeding with older dogs, but aging also produces a general loss of sexual libido and reduced conception rates.

Mammary gland changes may lead to nipple enlargement in the old dog (both male and female).

The majority of these endocrine changes are eminently treatable.



The dreaded 'C' word – it's something that we can't escape. As our canine companions continue to live older and longer, they become more predisposed to various cancers.

CANCER

The most common disease found in dogs 15 years old or more is neoplasia (cancer).

In part, this results from the reduced functioning of lymph nodes which impairs the ability of the old dog's immune system to combat disease agents.

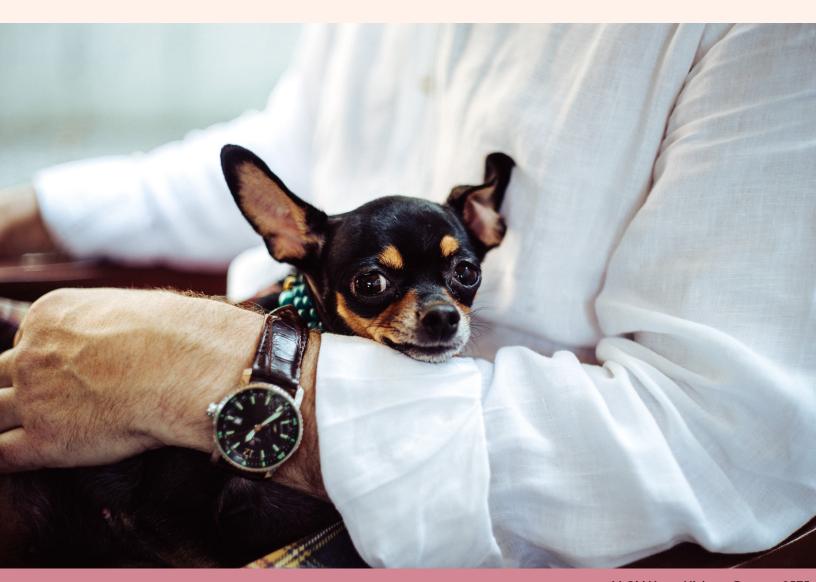
In dogs aged 15 or older, cancer occurs at a rate of about 26% - as compared to 17% for digestive tract disorders, 16% for heart and circulatory problems and 12% for kidney-related problems.

Any part of the body can be affected. Skin and mammary gland tumours are the most prevalent tumours in the old dog. The incidence of malignant mammary gland tumours is 50 to 60% for dogs 11 years of age or over. Another good reason to desex bitches early, since these cancers are less likely to occur in bitches which are desexed earlier.

Diagnosis of cancer is made by symptoms relating to the area involved, physical examination, laboratory examination and biopsy.

Sometimes surgery (taking a biopsy) is needed in order to make a diagnosis or to determine if surgical removal is possible.

Radiation and drugs are other methods of treatment if the prognosis is good (i.e., if the tumour has not spread to other areas).



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As with us humans, truly, old dogs can suffer greatly with the combination of physical and behavioural changes commonly associated with aging. But it does NOT have to be so.

While the maximum lifespan of a dog probably cannot be increased beyond its present limits, there is much we can and should do to improve the quality of an older dog's life.

Older dogs are in an inevitable transition between life and death, and their situation demands increased care and understanding on our parts.

To help increase the lifespan of your pet and to improve the quality of his or her life in old age, I recommend you do the following:

IMPROVING THE QUALITY OF LIFE OF YOUR AGING DOG WHAT CAN YOU DO?

- Avoid stress and excessive restraint; allow your older companion to be itself as much as possible.
- Feed a commercial balanced 'senior' diet two or more times a day.
- Check your pet's water intake and urine output daily.
- Exercise two or three times a day.
- Come in to see me twice a year (more often if needed) for veterinary check-ups.
- Groom your pet frequently, cleaning the eyes and ears regularly. If you do not want to do this yourself there are plenty of great groomers around.
- Provide plenty of warm, comfortable bedding in winter and appropriate bedding in summer.
- Maintain a calm, empathetic, warm and loving attitude.

EUTHANASIA Always a difficult topic and an even harder decision...

A decision regarding euthanasia (putting to sleep) is difficult for ANY devoted dog owner to make alone and certainly one in which I will be helpful.

I have a 'Quality Of Life' chart that I give to owners of older dogs to fill in. This chart is for them to complete and it allows them to make a rational and balanced decision about the quality of life of their companion.

Euthanasia is a reasonable course of action in cases where the prognosis is hopeless or in cases where the continuing life of the animal would be painful and miserable.

However, there are circumstances where we can offer treatments to keep the older dog alive while the owner, for one reason or another, does not wish to do so.

In these cases the owner must make clear the reasoning behind such a decision because we will not put an animal to sleep if the reason is not, in our opinion, justified.

Euthanasia is a privilege of the veterinary profession only. It is one veterinarians do not wish to abuse.

The majority of veterinarians use an intravenous injection of an over-dose of barbiturates to euthanase an animal. This is quite painless and the animal dies immediately by going to sleep, often before the injection is even completed.

A veterinary practitioner is legally bound to euthanase a dog when you request and pay for this service.

We ask that you sign a euthanasia request form. Feel free to ask to be present while the procedure is being carried out or even to see the dog after the euthanasia (if you have not been present and thereby set your mind at rest).

Owners may, of course, take the body with them if local city ordinances allow. If not, we can tell you how the body is disposed of. Pet cemeteries and cremation facilities are available.



CONCLUSION

Dog care requires your dedication throughout the dog's life, beginning in puppyhood and continuing through old age when even more patience and understanding are required.

Informed owners who are compassionate and responsive to the needs of older dogs can do much to lessen the stress of old age and to enjoy their pets more fully in their declining years.

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