

## CARING FOR AN ELDERLY AND AGING PET

There are so many myths around the idea of an aging dog. That old joke “you can’t teach a dog new tricks” is far from the truth because you can, it just takes longer. The website <http://www.petplace.com/dogs/geriatric-dog-care/page2.aspx> defines the aging process as “a gradual decline in the body’s ability to repair itself, maintain normal body functions, and adapt to the stresses and changes in the environment.” Dogs continue to learn into their old age. The length of a dog’s life can be dependant on his breed but also, “genetics play a part to some degree by hormone systems that are passed on. (Bruce Fogal A Dog’s Mind). Mostly though, learning is impacted by the quality of life and environment you have provided him. Socialization, exercise, games, check up’s, and grooming are instrumental in a dog’s longevity. The aging process also depends on the individual dog, and will happen at different rates. There are many different things that happen to your dog both physically and mentally when aging, and these changes require special care by the owner.

As a dog grows older, most physical functions begin to slow down. Although they were once able to leap in one bound to get that ball, it may now take a little longer. The aging process usually involves the onset of arthritis in the joints. It can become quite a chore for a dog to be able to kneel to a lying position or attempt to get back up again. Lack of movement can also cause loss of muscle tone and result in slower reflexes. Dogs can also develop calluses on their “elbow/knee” areas because they are lying down for longer periods of time. A dog’s skin also will become thin and damage easily. Skin problems can also appear in older animals such as dry, flaky skin with cancerous or begin tumors developing. You may also notice that an elderly dog has lots of other bumps under his skin called “fatty lumps”. These are usually harmless and the veterinarian rarely removes them unless they impede the dog’s mobility or change in size or hardness. Fur and coat condition will start to decline and become thin and the dog will start to grey usually starting around the muzzle and eye area. Along with coat and fur problems, you may also notice the dog’s nails are much more brittle than before, and the pads on his feet have thickened. Dental problems usually occur as the dog gets older because of disinterest of chewing, chipped or worn teeth, and tartar build up.

The dog’s senses also begin to show the signs of aging. Some dogs will develop a “cloud” over his eye, which reduces eyesight. Tear ducts can shut down leaving the dog with pus developing in the eye area. Glaucoma is one of the very common eye diseases you will find in an elderly dog, which can eventually lead to blindness. The sense of hearing often decreases as well. The dog will either develop poor hearing, where he no longer hears higher pitched notes, or complete deafness. The sense of taste is also affected, but not to the same degree as the other senses. You may find that his once favorite food is no longer his favorite. Out of all the senses, the sense of smell is the least affected and usually the last to go, if ever at all.

There are several internal functions that begin to slow or even shut down as well. *Blood vessels start to lose their flexibility, which causes the lungs to become inefficient. This in*

turn sends less oxygen to the brain, affecting the dog's short and long-term memory. (Bruce Fogal, *The Dog's Mind*) Heart rates also slow down, reducing the volume of blood being pumped through the body. Their metabolism slows down, creating obesity in some dogs. Along with these hormonal changes, comes the inability for the dog to regulate his body temperature. An owner may notice that the dog no longer tolerates extreme heat or cold, or may have problems adapting to weather changes. The internal organs also begin to slow down and become less efficient. Inefficient functions of the organs can cause result in weight loss, incontinence, constipation, or sudden high water intake just to name a few. Reproductive organs will also start to shrink during the aging process.

Not only does the dog's physical well being become at risk, but also so does his mental state. "*The aging process is thought to start in the hypothalamic,*" (Bruce Fogal- *The Dog's Mind*) an area in the brain. The membrane around the brain called the meninges thickens and hardens. Along with the internal organs, the size of the brain and the number of nerve cells start to decrease. An older dog's brain weighs less than that of a younger dog. As the brain ages, the synaptic contacts do not work to full capacity. *Brain chemicals that aid in transmission become inefficient and transmission goes from 225 mph to 50 mph.*" (Bruce Fogal, *The Dog's Mind*). This process and the fact the heart rate begins slowing down (reducing the amount of blood flowing to the brain), is why it takes longer for the dog to learn something new, and why an owner may notice that the response times to commands become slower.

The aging process affects the dog more than just physically and mentally. A dog's behavior can also show mild to significant changes. "*Aging interferes with sensory perception, hormone production, and the ability to communicate, all of which lead to sometimes dramatic changes in the dog's behavior.*" (Bruce Fogal, *The Dog's Mind*). Some changes that may occur may be as mild as sleeping more, taking longer to respond to commands, becoming more comfortable on a leash than off, or less interested in activities they used to enjoy or their surroundings. Water intake is also considered a behavior change and can indicate failing organs. Mid range behavior changes could be irritability and less tolerant of other's behaviors, reverting to puppy like behaviors such as mild separation anxiety and having accidents in the house. Behavior changes can also be extreme and heartbreaking. Changes may include snapping or startling easier if they have failing eyesight and hearing, as they can no longer hear or see what is around them and it may catch them off guard. Cognitive Dysfunction Syndrome, or CDS, is "*similar to Alzheimer's Disease only in dogs and is marked by an abrupt change in behavior. The dog may suddenly look "lost" in a room. Among other things, start barking, doesn't sleep well or recognize loved ones, or have accidents.*" (Bonham, Margaret. *The Complete Idiot's Guide to Dog Health and Nutrition*). This occurs simply because the nerve cells do not replenish themselves as they die, and that certain proteins can form around the cells causing them to not function properly and creating a miscommunication between the cells themselves. This does not happen in all dogs but in the dogs that it does affect there were severe changes to their behavior.

Special care and precautions can be taken to ensure your elderly pet is as happy and healthy as can be. An owner becoming educated about caring for an elderly dog can learn to help detect early on diseases and can put measures in place to manage the health, which can extend their lives. Exercise is just as important now as it was when he was a puppy. At this stage of life, exercise would have to be adjusted to what the dog is conditioned and able to do. This can be done by taken shortened walks more frequently, rather than the long walks you may have taken him on in the past. Walking will also keep his mind stimulated by the continuous exposure to the sites and sounds of his environment. Continuing to play games with your dog will also help keep his mind sharp. Due to the fact that your dog may not be as active as before, a veterinarian may advise to change the dog's food to a lower calorie one so that the dog does not gain too much weight. With age also comes arthritis, to at which point a glucosamine supplement might be recommended to help keep the joints and muscles healthy. Providing a softer, thicker bed for some dogs will not only give him a nice place to lay down for the longer periods of time but will also help with preventing those calluses that were mentioned earlier. Although teeth cleaning should be a regular routine from puppy-hood, it becomes even more important in older age. An older dog may not be as interested in chewing on bones to help keep tartar in control. By not attending to your elderly dog's teeth, you could run the risk of having them put through an anesthetic procedure to have them cleaned. This could be costly, as routine blood work is needed to ensure it is safe to have your dog put under anesthetic. Depending on your veterinarian, they may or may not recommend continuing vaccines. Some veterinarians are of the opinion that in very elderly dogs, that by this stage they should have enough immunity from disease from all the years of previous vaccines. Most importantly all veterinarians will agree regular and more frequent check ups including full blood panels are an absolute must for the early detection of diseases, thyroid problems, or organ failure and so that a management plan can be put in place. You may also want to consider grooming your dog more often. This will help with circulation and also give you the opportunity to pick up on any new lumps and bumps or changes in any existing ones. Depending on how badly your dog's senses are failing you may have to alter the environment for him. If you have a deaf dog, for example, you will have to change your habits as well by things such as "*checking behind your car before reversing outside your home.*" (David Taylor. You and Your Dog) Other environmental changes could also include avoiding stairways and making ramps for the dog to go up and down, and providing a constant routine that your dog can rely on which will help him cope with every day life. Teaching a deaf dog hand signals can also be useful. If the dog's eyesight is failing, removing obstacles and giving clear pathways will help avoid the dog accidentally bumping to objects. By taking an active role in caring for your elderly dog, he will still be able to maintain a good quality of life for an extended time.

Watching our pets, or even our human loved ones, grow older and become frail is a difficult thing to do. However, if an owner becomes very aware of these changes from early on, prevention and good health management will help your dog enjoy a few more years. It is important to know how to manage the changes that are happening at this time of your dog's life to help him through the transition of some of the difficulties he may

face of lesser senses, sore joints, and the environmental changes that may have to be made.

## **Resources**

Bonham, Margaret. The Complete Idiot's Guide to Dog Health and Nutrition (2003)  
Alpha ISBN 0-02-864455-7

Brum, Douglas. <http://www.petplace.com/dogs/geriatric-dog-care/page2.aspx>

Fogle, Bruce. The Dog's Mind (1992) Howell Book House ISBN: 978-0-7207-1964-2

Nash, Holly. <http://www.peteducation.com/article.cfm?c=2+2110&aid=614>

Taylor, David. You and Your Dog (1996) Dorling Kindersley Publishers, 274 ISBN0-394-72983-8

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