

Dog Tips

Cat Tips

Dementia: A Very Serious Problem for Our Beloved Pets — And How to Prevent It

As in human Alzheimer's, millions of pets also suffer from dementia, as early as ages 6 to 8. More and more dogs are dying of the condition, and cats are living in confusion. So what's going on? And how can you keep your pet mentally sharp?

Reviewed by Dr. Becker

STORY AT-A-GLANCE

- In Britain, over a million pets suffer from dementia (cognitive dysfunction)
- U.K. veterinarians are warning pet parents that sedentary lifestyles and poor diets are to blame
- In the U.S., pets also develop cognitive dysfunction, and veterinary experts have developed ways to measure the condition in both dogs and cats
- Along with a nutritionally balanced, species-appropriate diet and regular exercise, there are many other things you can do to help your aging cat or dog maintain good mental function
- The earlier you and your vet identify cognitive dysfunction in your dog or cat, the better the chances you can help her stay mentally sharp

Editor's Note: This article is a reprint. It was originally published February 18, 2017.

According to the U.K.'s The Telegraph, a growing number of dogs and cats in Britain are suffering from dementia, and veterinarians are warning pet parents that sedentary lifestyles and poor diets are to blame.

An increasing number of dogs are dying of the condition, and cats are displaying "clumsiness" and confusion.

According to veterinarians, an estimated 1.3 million pets in Britain suffer from dementia, with a third of dogs showing signs of mental decline by the age of 8, and two-thirds by the age of 15. In cats, the condition is seen in about half of all kitties 15 and older, and a third aged 11 to 14.

Professor Dr. Holger Volk, a leading veterinary scientist at the Royal Veterinary College, told the Telegraph, "I don't think that people really realize how serious this problem is." He believes a lack of physical activity and a diet of "cheap pet food" play a primary role in the onset of dementia in dogs and cats.

"We are seeing an increase in pet obesity," says Volk. "Just as we see health problems among people who are less active so we see the same problems with their pets eating more and getting less exercise and this may lead to an increase in dementia."

Volk says U.K. pet parents have very little understanding of the problems they create by allowing their animal companions to become inactive and overweight, and this lack of awareness is causing them to miss the signs of declining health in their pets.

Signs of Dementia in Dogs and Cats

According to The Telegraph, signs of dementia in pets include:

- Getting "stuck" behind furniture and needing help to get out
- Walking in circles
- Forgetting what they've just done, for example, greeting their owner, and immediately doing it again
- Forgetting to eat, or forgetting they just ate
- Standing near the hinge side of a door instead of the side that opens
- · Struggling to find their way around
- "Drifting away" from activities

Volk believes the key to preventing or slowing the onset of dementia is to make sure pets get regular, vigorous exercise. "Neurons in the brain go into decline with dementia," says Volk, "and the more you exercise the more they remain active."

He also recommends transitioning pets to a high-quality pet food containing fatty acids.

Dementia Rates in US Dogs

Here in the U.S., dementia or cognitive dysfunction syndrome (CDS) in dogs and cats has been on the radar of researchers, the veterinary community and many pet parents for at least a decade.

About a quarter of U.S. dogs 10 years and older show signs of brain aging, and over 60% of dogs have symptoms by the age of 15.² However, dogs as young as 6 can begin to experience mental decline.

In a relatively young dog, it's especially important to investigate for an underlying illness or disease before making a diagnosis of age-related cognitive decline. In dogs, we look for one or more of the following five common signs of CDS:

- 1. Increased total amount of sleep during a 24-hour period
- 2. Decreased attention to surroundings, disinterest and apathy
- 3. Decreased purposeful activity
- 4. Loss of formerly acquired knowledge, which includes housebreaking
- 5. Intermittent anxiety expressed through apprehension, panting, moaning or shivering

Other signs of mental decline include failure to respond to commands and/or difficulty hearing, inability to recognize familiar people and difficulty navigating the environment.

There are three main contributors to the changes in an aging brain that cause a gradual impairment in cognitive functioning: oxidative stress from free radical damage, formation of lesions on the brain and alterations in oxygen and energy availability.

The brain is thought to be more sensitive to the effects of oxidation than other tissues of the body. The damage to your dog's brain caused by oxidative stress can cause a decrease in cognition as well as degenerative nerve disease similar to, for example, Alzheimer's disease in humans.

The aging process also involves the accumulation of beta amyloid deposits on the brain. These deposits consist of nerve-damaging protein that forms plaque. This "senile plaque" buildup interferes with the transmission of signals from the brain.

How Feline Cognitive Dysfunction Is Measured

Cats can also suffer a decline in their mental faculties, and many veterinarians and feline experts use the acronym **DISH** to measure cognitive dysfunction in kitties.

D = disorientation. Kitties with CDS may wander aimlessly, stare at walls and appear lost or confused at times. They may also intermittently fail to recognize family members.

I = reduced social interactions. A cat with CDS may seem confused when his guardian arrives home at the end of the day. He may also show less interest in being petted or sitting in his owner's lap.

S = changes in sleep patterns. An affected cat may sleep more during the day but turn into an insomniac at bedtime, wandering the house and often crying out for no obvious reason.

H = house soiling/housetraining. Cats with CDS frequently lose their housetraining skills. This happens because they either forget the location of the litterbox, or they are no longer terribly concerned about their own cleanliness or perhaps a bit of both.

CDS in cats hasn't been studied, so no scientific explanation currently exists for what causes the problem in felines. However, in humans and dogs, the condition is thought to be caused by Alzheimer's-related changes in the brain (the formation of beta-amyloid plaques) or cerebrovascular disease.

In dogs with CDS, it is known that pathological changes in the brain are closely associated with the severity of dementia symptoms, and the same probably holds true for cats.

10 Tips to Help Your Aging Pet Stay Mentally Sharp

Fortunately, there are many things you can do to help your dog or cat maintain good mental function for as long as possible, and delay the onset and progression of cognitive decline.

1. Feed a nutritionally balanced, species-appropriate diet that includes omega-3 essential fats, such as krill oil, which are critical for cognitive health. The perfect fuel for aging pets is a healthy variety of fresh, living food suitable for your carnivorous cat or dog.

- 2. Eliminate all refined carbohydrates (grains, potatoes and legumes) to allow more room for excellent-quality protein, full of critical amino acids, to be fed.
 - Eliminating extruded foods (kibble) means your pet won't be consuming the toxic byproducts of the manufacturing process, including heterocyclic amines and acrylamides. You can improve digestion and absorption of nutrients by feeding a less processed diet, not to mention improving your pet's microbiome, which has been linked to improved cognitive health in humans.
- 3. Stop vaccinating and start titering. Vaccines don't "wear out" over time, and more vaccines means more adjuvants and heavy metals that accumulate in your pet's brain.
- 4. Keep your pet's body and mind active with regular exercise appropriate for her age and physical condition, and mental stimulation (puzzles and treat-release toys can be beneficial). Make sure your dog has opportunities to socialize with other pets and people. Think of creative ways to enrich your cat's indoor environment.
- 5. Provide a SAMe (S-adenosylmethionine) supplement as a safe and effective way to stall or improve mental decline. Consult your holistic veterinarian for the right dose size for your dog or cat. There are also commercial cognitive support products available.
- 6. Medium-chain triglycerides (MCTs) have been shown to improve brain energy metabolism and decrease the amyloid protein buildup that results in brain lesions in older pets. Coconut oil is a rich source of MCTs. Give 1/4 teaspoon for every 10 pounds of body weight twice daily for basic MCT support.
- 7. Other supplements to consider are jellyfish extracts, resveratrol (Japanese knotweed), which protects against free radical damage and beta-amyloid deposits, ginkgo biloba, gotu kola and phosphatidylserine a nutritional supplement that can inhibit age-related cognitive deficits. Consult a holistic veterinarian for dosing guidance.
- 8. Keep your pet at a healthy size overweight dogs and cats are at significant increased risk for disease as they age.
- 9. Maintain your pet's dental health.
- 10. It's best to have twice-yearly veterinary visits for pets no matter the age, but this becomes even more important for dogs and cats getting up in years. Keeping abreast of your animal companion's physical and mental changes as he ages is the best way to catch any disease process early.

Ask your vet to perform a blood test to check your pet's internal organ health to make sure you are identifying possible issues early on. There's also a blood test that measures inflammatory fats you may want to consider. You can find more information at VRD Health.

These recommendations won't be tremendously helpful for a pet in the advanced stages of cognitive decline, which is why it's so important to diagnose and begin treating the problem as early as possible. Cognitive dysfunction is a progressive disease that can't be cured, but early diagnosis and intervention can slow mental decline and offer your aging pet good quality of life.

Sources and References

¹ <u>Telegraph, September 6, 2016</u>

² dvm360 July 1, 2010